

International Journal of
Social Economics

**30 years of *IJSE*: Festschrift in honour of
Professor John O'Brien: part 2**

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International Journal of Social Economics

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30 years of *IJSE*: *Festschrift* in honour of Professor John O'Brien: part 2

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Barrie Pettman

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Interest groups and government growth in Spain during Franco's dictatorship (1939-1975)

Jesus M. Zaratiegui

Keywords Spain, Government, Financing, Pressure groups

This paper presents and discusses the rent-seeking process that occurred during Franco's regime in Spain (1939-1975). Once the Civil War (1936-1939) was over, those who won the war (militiaman, right-wing factions) took control of the key positions in the new government. That meant the transfer of rents from the budget to veterans of war and their relatives, fuelled by the creation of an increasingly strong and well-organised interest group. The author takes a public-choice approach and is inspired by a similar study by R. Holcombe on the American Civil War.

Socioeconomic analysis of the determinants of TANF recipients in the USA and policy implications

Yu Hsing

Keywords Social welfare, Unemployment, United States of America, Social economics, Government policy

The dramatic decline in the number of welfare recipients in the USA is examined. The unique features of this article include the use of time series data, the consideration of different welfare benefits and socioeconomic variables, and the application of the generalized autoregressive conditional heteroskedasticity model. Finds that less benefits including cash, food stamps, and Medicaid, lower percentage of births to unmarried mothers, lower dropout rates, lower unemployment rates, more budgets for administrative expense, and welfare reform are expected to reduce welfare caseloads. If the recent unemployment rate of 6.1 percent persists for one year, welfare caseloads would rise by 525,300 from the year 2000 level, holding other factors constant.

The Malthusian physiognomy of Nazi economics

Guido Giacomo Preparata

Keywords Economic theory, Population, National debt, Germany

The Nazi economic recovery, achieved between 1933 and 1938, displayed striking features of brilliant economic overhauling of a capitalist machine that had been plagued by a prolonged crisis. The means employed to effect the recovery appear to follow a Malthusian exercise in the rehabilitation of the function of effective demand: the Nazis, prompted by expediency and necessity, took remedial action that was very much in consonance with the canons of classical political economy. The succinct analysis of such an exercise in the context of the strong governmental regimentation of the Third Reich may provide insight into the nature and future of the capitalist regime, in the light of the fact that its principles, business and philosophical, and its implications for the world at large, so far, have not shown a marked departure from the way in which they were understood by the spirit of the 1930s, in Germany, as well as abroad.

The "new" economy: complexity, coordination and a hybrid governance approach

Wolfram Elsner

Keywords Social economics, Governance, Market economy, Communication technologies

The paper starts from the increasing spatial and functional fragmentation of value-added chains, global de-regulation and dis-embedding of "markets", and interdependencies among the Net-based digital technologies. It develops a socio-economic setting with ubiquitous direct interdependencies and interactions, Net-externalities, "strategic" strong uncertainty, and omnipresent collective-good and social-dilemma problems. These entail co-ordination failures, either in the form of conventional market failure (i.e. collective blockages of action) or of "wrong" or outmoded institutional co-ordination and, thus,

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wide-spread technological “lock-ins” that are indicative of insufficient ability of collective action. This is particularly true for de-regulated, individualistic cultures. In contrast, sustainable innovation, used in a broad, i.e. technological and institutional, sense, requires an effective collective action competence. This, in turn, requires a new and increased co-ordination. Against this background, the global corporate economy has spontaneously developed private individualist substitute arrangements to cope with the new complexity, such as local clusters and hub-and-spoke networks, which all have severe shortcomings. With reference to what we call the “Linux” paradigm, the paper discusses the possibility of a spontaneous evolutionary, i.e. collectively learned, institutional co-ordination through emergent collective action and networks with “good” governance. The paper argues that only a hybrid system that consists of “well-governed” networks and a new approach towards more comprehensive and deliberate “interactive” and “institutional” public policy, supporting collective learning and emergent institutional co-ordination, is capable of solving the complexity and co-ordination problems of the “new” economy by increasing certainty, stability and more continuous and comprehensive innovation. This new policy approach is outlined at the end.

Child income poverty and child deprivation: an essay on measurement

Amélia Bastos, Graça Leão Fernandes and José Passos

Keywords Poverty, Children (age groups), Child welfare, Measurement

This paper is a study on child poverty from two perspectives: child income poverty (derived from family income) and child deprivation (evaluated by non-monetary indicators). On the one hand, empirical evidence supports the thesis that income-based poverty measures and deprivation measures do not overlap. On the other hand, the relationship between poverty and the child’s living conditions is not linear. Uses micro-econometric techniques to analyse child income poverty and present deprivation indicators, and thereby an index of child

deprivation, to study child poverty. The measurements used are centred on the child. The results obtained support the thesis that the study of child poverty differs whether the focus is on the child or on the family.

Globalization and inequality according to Veblen

Donald C. Wellington and Sourushe Zandvakili

Keywords Capitalist systems, Globalization

Thorstein Veblen’s ideas regarding capitalism, particularly as expressed through his view of the American upper classes of the time, are examined. The work of Veblen himself, as well as other, later economic theorists, is discussed. Particular attention is paid to how Veblen’s ideas can be applied to today’s social economy, especially where globalization and inequality are concerned.

On making human development more humane

Humayon A. Dar

Keywords Economic growth, Ethics, Islam

It is widely recognised that the human development index (HDI) does not totally capture the rich content of the human development concept, necessitating a more adequate measure of human development. This paper introduces an ethics-augmented human development index (E-HDI) as a new indicator of socio-economic change and development. The E-HDI incorporates freedom, faith, environmental concerns and the institution of family in the HDI and ranks countries of the world accordingly. It is envisaged to be of practical use in national policy making and may also be related to agenda of the bilateral and international development agencies. Just as the HDI has managed to shift discussions beyond gross national product, the E-HDI is expected to inject ethical concerns more explicitly into policy making in the contexts in which the human development reports are used.

Political implications of cultural evolution

Horst Feldmann

Keywords Culture, Social change, Freedom, Law

In the course of cultural evolution, certain institutions have emerged and become dominant in the Western world that have led to an unprecedented rise in prosperity and population. This paper first explains the characteristics and significance of cultural evolution. Subsequently, it explains the fundamental role of politics and the scope for political action in cultural evolution, clearing up some fairly widespread misconceptions about this question. Finally, it derives three specific guidelines from the characteristics of cultural evolution that should be followed in politics. First, the principle of individual freedom should be realized as far as possible. Second, the rule of law should be secured. Third, the scope of action of the state should be closely limited and the state should be decentrally organized. The more consistently these guidelines are followed, the better the prospects of the respective society to survive and prosper in the competitive process of cultural evolution.

The formation of conventional expectations in Keynesian fundamental uncertainty

Theodore T. Koutsobinas

Keywords Social economics, Keynesian economics, Expectation

This article develops an analysis of the conventional formation of expectations by means of introducing an overlooked factor in the analysis: the role of inference. Individual inferences and changes in evidential weight of beliefs and in the state of confidence are integrated with an analysis of the conventional character of expectations in a manner that is consistent with evidence provided by research in social psychology. This approach provides the link between the “agency” approach and the “structure” approach in Keynesian analysis that has been stressed as an important development. It also improves our understanding of the mechanisms underlying economic behavior under uncertainty such as liquidity-preference in different social and cultural settings.

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Interest groups and government growth in Spain during Franco's dictatorship (1939-1975)

Jesus M. Zaratiegui

University of Navarra, Pamplona, Spain

Keywords *Spain, Government, Financing, Pressure groups*

Abstract *This paper presents and discusses the rent-seeking process that occurred during Franco's regime in Spain (1939-1975). Once the Civil War (1936-1939) was over, those who won the war (militiaman, right-wing factions) took control of the key positions in the new government. That meant the transfer of rents from the budget to veterans of war and their relatives, fuelled by the creation of an increasingly strong and well-organised interest group. The author takes a public-choice approach and is inspired by a similar study by R. Holcombe on the American Civil War.*

During the last few decades more attention has been given to the public sector's failures. Consequently, it is assumed (Becker, 1983) that government departments could be more sensitive to political pressure than to the preferences of the consumer. Besides, regulations might help to protect the pressure group's interest.

Active minorities are used to act as a catalyst to set off new political trains in public spending. For those who have individual incentives to achieve economic advantages tend to create demanding coalitions supporting their interest. Meanwhile, the ones with little to loose or unaware of the potential losses in the process, adopt a low stance as passive minorities. Among these pioneers who are of this focus are G. Tullock and J. Buchanan (public choice school).

This paper follows the Virginia School's analysis on interest groups. They are organised pressure groups having incentives to lobbying in favour of private expenditures whose payment is distributed among all the population. The key issue could be the group's strength because of its size or organisational capability.

The starting point is Holcombe's (1996, p. 175) analysis of interest groups' activity after the American Civil War and the transition to government growth in 1870-1915. He notes a large percentage increase in federal expenditures during the Civil War followed by a higher level of expenditures after the war. Authors such as Rassler and Thompson (1985) and North (1985) follow the same path. We apply this scheme to the Spanish post-Civil War period.

During General Franco's rule in Spain (1939-1975) it is possible to note two different trends: the growth in the size of government (public expenditures as a percentage of GNP), and the transfer to the Spanish Civil War (SCW) veterans of a set of rents and benefits not the least because of a privileged treatment. They organised themselves into a really effective pressure group.

In this paper we will try to show how, after the war (1936-1939), those veterans were in fact an interest group that carried out a number of activities to strengthen their position. The new regime's ideological change (a sort of fascist corporativism) made

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Spaniards ask for a bigger government and one more oriented toward protecting citizens' economic interest. The following analysis makes the point that the activity of the Civil War veterans was the basis for the transition to government growth.

Interest groups
and government
growth in Spain

Interest groups in Spain after the Civil War

After elections in 1931, the monarchy – one of the oldest in Europe – fell and a Republican regime took power in Spain. The lack of suitable leaders and an hostile attitude towards religious matters, in a country deeply rooted in Christian beliefs, brought about a growing national polarisation between politicians and the army. The situation became almost untenable, and in 1936 blew up, resulting in the SCW. A sizeable chunk of the military ranks (headed by General Franco), representing rural and traditional classes of Spanish society, opposed the elected government (more and more under socialist and communist control).

The outcome of the conflict (1936-1939) is well known. One cannot lose sight of the fact that Franco's victory meant the exile, death or imprisonment of thousands of people on the other side. Few government heads have enjoyed such a power. Franco found full support coming from the Army and the official political party, the Falange Española Tradicionalista (FET). As if that were not enough, in both organisations veterans were hard-core, loyal to the new government.

After the Civil War, ex-soldiers made up 4 per cent (some 1 million people) of the total population, but adding to the total figure their families and relatives, comprised a larger fraction of the voting population. Franco always counted this group as one of his main political assets, and pursued the support of veterans as a group, paying off his supporters with increasing benefits.

In 1940 veterans began to organise local committees and meetings that eventually were the catalyst to create the same year an umbrella group – the Brotherhood of Veterans (HEC) – for the purpose of helping these ex-soldiers. This organisation was technically non-political and aimed to promote the veterans' cause through mutual support. But it grew under the shadow of and got the full support of the Franco's regime. The HEC managed to establish the Memorial Day or the political orchestration of The First of May, the feast of workers. At the same time, all kinds of political and economic rights were denied to those belonging to the defeated group in the war (many of them suffered imprisonment for a number of years).

The strength of this force was different in every region, and was stronger in those areas that had supported Franco's side during the war (Castille, Navarra). These regions received many economic rewards (for example, the maintenance of special economic laws in Navarra). Meanwhile, the areas that supported the losing side (Catalonia, Basque Country) were deprived of most of their political rights. Republican veterans were not eligible for pensions, consequently, veteran's benefits were transferred from the general country to recipients in those specific regions.

The historical details are worth reviewing in order to understand how veterans interests became so successful after the Civil War. The veterans supported Franco's regime, and in exchange were paid off with generous pensions. In the post-war cabinets, the veterans always had a wide representation through the top men in the Army and a paramilitary group, the falangistas. This provided a solid platform for the defence of their interests.

The bulk of Franco's first cabinet – comprising 12 people – were militiamen (four) and *falangistas* (five) – mainly veterans of war. During the first stages of the new regime until 1945, militia personal took 46 per cent of all the ministerial posts, and 37 per cent of the government offices (Jerez, 1982, p. 230). At the same time, the *falangistas* got 40 per cent of all ministerial appointments, and 30 per cent of all high administrative positions. In the regime's top positions until 1945 (some 1,000), there were 232 militiamen and 238 closely related to the *falangistas*. Affiliation to FET in 1942 reached the peak with 932,000 individuals (only men).

The winners obtained full control of the army. A centralised and bureaucratic military establishment would parallel the development of the civil service. Despite Franco's reluctance, the very fact that three different departments (Air Force, Army, Navy) were established, shows their key role.

From the very beginning, the Army held a pivotal position in the new regime (Payne, 1987, pp. 256-7). They reached the highest position of those in the regime's political arm (the FET). In a matter of a few months afterward, the new pressure group pushed hard for the approval of measures that meant a transfer of rents to the people that would succeed them. Among other measures, we can highlight some: increase in salary (1940), between 17 per cent and 40 per cent, according to the rank; access to shops with bargain prices (in the context of severe food shortages for the country); labour contracts as civil servants; precedence was given to those who had war experience (of course, the winner faction); promotions and military awards after the war (new rents were attached to them).

The official Army count had risen to 900,000 in 1939, later on reduced by Franco to 230,000 (in 1940), even though the Second World War increased the roll again to 400,000 (1945). The Marine Corps was made up of some 25,000 people in 1940; and the Air Force counted 4,000 officials and 31,000 men (data from 1945). Also under military control remained the Guardia Civil (60,000 men in 1941). The force contained in total over a million men of which three quarters were to be demobilised until 1953, so becoming war veterans.

The new situation came out of the government's concern about political status. Officialdom continued to be an artificially inflated body with more than 25,000 officials in 1952 and the highest retirement age in Europe (Payne, 1987, p. 439). And the ones who went into active reserve received full payment. Franco was conscious of this squandering of resources and of the personnel's surplus, but he never dared to change the status-quo imposing a full reform, no doubt because of fear about its political consequences. He maintained something that the regime might have collapsed without. On July 1952, a new disposition took into affect concerning top Army chiefs with civil jobs: from then on they would be on both pay-rolls. And in 1953 some 2,000 officials retired with full payment and extra-bonuses. The Army shrank to some 250,000 soldiers, the same number for the next 30 years to come.

In the analysis of the rent transfer mechanism we are showing here, there is a misunderstood point. No doubt that, as a whole, the force of the Army and police lost significance among the new regime's economic priorities. The assigned national budget's percentage diminished throughout that time: 50 per cent (in 1940); 40 per cent (1945), 35 per cent (1953), 30 per cent (1955), to reach 25 per cent in 1959. But we are dealing with very high amounts (in fact, the highest in Europe after the end of the Second World War). It is more relevant, though, that the main reduction affected new

weaponry. Veteran pensions remained untouched. This allows us to get an idea of the degree of organisation and efficiency that this interest group achieved: for Spain was going through a severe recession and in real terms a reduction both of gross national product (GNP) and of per capita rent.

Interest groups and government growth in Spain

Veterans' expenditures after Civil War

Benefits to Civil War veterans were defined by laws of Congress in 1939. Payment went to disabled veterans and to surviving widows and children of those killed in the war. The recession that badly hit Spain between 1939 and 1957 – partly due to international isolation – caused a slowdown in the rent transfer to veterans. But the budget surplus from 1958 onwards provided available funds, so Franco could compensate veterans in exchange for their support. The surplus provided an opportunity for them to succeed.

The main difficulty is to measure the real amount of this transfer. Statistics prior to 1957 are not available or do not deserve much credit. Even the annual budget does not reflect accurately these minor entries. We do not know where to look. One item in the budget which could help to cast light on the issue is pensions and social security. It reflects the payments for all sorts of social services, and during the first years of the regime, the main expenditure was veterans' pensions. Table I illustrates the total amount (millions of peseta) and the percentage of the budget.

These show that right from the beginning, the rent-seeking activities were at the forefront of the veterans' organisational activities. There was a steady growth with ups and downs related to the economic cycles, and peaking in 1956 and in 1969-1972.

Another source available to find a fair estimation of the real figures concerning public spending on ex-soldiers can be found in the budget item for elderly assistance (see Table II).

As we can see, the small expenditure expansion is only broken in the last year (1949) with a 62 per cent growth. In any case, for the whole period, the ratio increases from 1 to 5. Yet in 1944, there were 172,579 people receiving some type of pension because of the Civil War: crippled and handicapped of war (28,421); the families of the deaths in war (29,701); Republican's militiamen and their families (79,579); other pensioners (14,162). The pensions outlay for SCW in the 1980s was 27,000 million (1980); 42 (1982); 47 (1984); 60 (1986); 75 (1987).

	Year													
	1935	1941	1942	1947	1950	1952	1954	1956	1960	1962	1964	1969	1972	
Millions of pesetas	386	375	654	1,268	1,520	1,375	1,824	4,457	3,931	5,196	8,283	41,262	60,325	
Per cent	8.3	6	7	8.7	8.1	6	6.5	11	5.4	5.6	6.5	14	15	

Table I.
The total amount (millions of pesetas) and the percentage of the budget spent on veterans' pensions

	Year									
	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Spending	103	172	171	183	252	300	300	300	309	497

Table II.
Budget item for elderly assistance (millions of pesetas)

Further measures in favour of veterans include the civil service and regulation in many areas. Legislative and institutional changes gave the central government control through the Civil Servant Law, which after the SCW restructured central employment; people ideologically in line with the political regime took control of bureaucracy; and a number of new central agencies and ministries were established.

Fundamental changes in the administrative nature of government took place. The point of reference is the political clientelism created during the previous period: changes in government meant changes in civil servants. Service jobs were made on partisan political grounds. The new trade union's scheme also provided a lot of room for appointments based on the loyalty to the political regime. Public employment rocketed in this time. Civil servants could expect their interest to be closely tied to the current regime (Holcombe, 1995, p. 20). There was a close link between civil service reform and the incentives in government to act as an interest group that would promote growth in public expenditures.

A number of services were cartelised: shipbuilding, railroads, steel. Holcombe (1995, pp. 16-17) points out the key issue: concerns about excessive competition and regulation as a way of protecting their economic interests against the forces of the market. International isolation for a number of years fuelled the process in this direction. Individuals wanted to protect their rights or to secure their property to further their economic interests. In railroads to stabilise rates and regulate routes to be more profitable than they could have been in a more competitive unregulated environment. The responsibility for regulation was transferred from the government to separate administrative agencies (e.g. to control the production of hydro-electric power).

In post-war times, economic and political circumstances paved the way for a rampant interventionism in labour issues, the most prominent outcomes being new regulations and a steady effort towards an universal social security: in 1945 the Health Service was created. The political factions supporting the regime during the SCW pushed forward to get the laws approved: veterans emerged as the main beneficiaries of these revolutionary changes. Also it forced the development of institutions as the Labour Guilds. The obvious consequence was the increase in payments for those who had a job.

We must keep in mind that there were many Republican ex-soldiers imprisoned, in exile, or ideologically biased when they tried to find a job. A number of state monopoly (as tobacco's) were granted to veterans and later on to the widows of those killed during the SCW. Even in the 1970s this scheme was used to compensate the victims of terrorism's families.

The government growth

The activities of the political interest group after the SCW laid the foundation for the transition to the government growth, a key feature of that period, in a sharp contrast to the years before, when there was little growth in central spending (Alcaide, 1988, p. 7). Prior to the SCW, expenditures were about 10 per cent of the GNP, by 1975 it grew to about 25 per cent.

The increase in veterans' benefits paid after the Civil War is an important part in the government growth: they represent the most substantial interest group outlays carried

out by the government in Spanish history. The veterans' programme paved the road for the domination of interest groups in the Franco era.

There has been a dramatic change: the 1940-1975 growth of the government is not just an extrapolation of former trends. Of course, the amount of government expenditures was higher in 1935 (4,655 million) than ever before (901 in 1901), but growing at a very slow rate (15 per cent on average per year during this period). The transition came after the end of the SCW. Central expenditures in 1940 were 6,241 million, 41,836 in 1957 (a 670 per cent increase) and 408 million in 1972.

Not the same can be said about the growth of public expenditures in relation to GNP. There was an increase in 1901-1935 (from 9 to 14 per cent) as a consequence of Morocco's war, but since 1935 it has remained at this 15 per cent level, even decreasing in critical years (1951, 1955). This really does not get us very far were it not for the sake of the overall tendency.

We follow Holcombe (1995, pp. 3-4) in the analysis of the major factors responsible for this transition of the government growth:

- A rising economy (mainly from the "stabilisation plan" in 1959) brought about an economic surplus, so providing opportunities for interest groups to look for central transfers of money; the period 1939-1958 means deep stagnation; from 1958 onwards there is budget surplus; the ratio between public expenditures and GNP goes up steadily: 18.8 per cent (1960), 21.3 (1968) and 25 per cent (1975); between 1958 and 1975 the revenues overweighed the budgetary spending, so the Treasury could pump a lot of money into the economy; especially good years because of budget surplus were: 1961 (20,000 million pesetas), 1962 (16), 1967-1969 (15) and 1972-1974 (45); veterans became an organised interest group attaining the government support, which allowed this group to be the first rent-seeking interest group in Spain's history to capture major transfer payments from the central government.
- The central bureaucracy was transferred to a group of political appointees, who owed their jobs and loyalties to the current administration and political regime (Holcombe, 1996, p. 4); during the mid-1950s a new group appeared, the technocrats, whose jobs were more objectively assigned, based on civil service examinations, so that principles of scientific public management were used to create a long-term workforce of career public sector employees.
- A decrease in central regulatory activities: the scope of its activities was narrowed to the protection of individual rights and the promotion of the economic interests of its citizens; budgetary amount had a reverse relationship with state regulations; between 1900 and 1959, strong economic regulation and small public spending went hand to hand; later on, after the "stabilisation plan" and political democratisation in 1975, the maintenance of a high orderliness coincided with the increasing and diversification of public expenditure.
- The growth of social outlays: no doubt this is mainly the reason for the increase in public spending. Pensions spending were more than 7 per cent of GNP in 1958 and fell to 5 per cent by 1966; but social expenditure almost doubled between 1960 (9 per cent) and 1975 (13 per cent).

Each of these changes led to the strengthening of interest groups that demanded a larger government in order to further their economic interests.

A major factor diminishing the real effects of these measures was the high level of inflation during the first post-war period (14 per cent on average in 1940-1951) even though it went down by 1951-1958 to 6.7 per cent. In fact, it wiped out all the monetary growth of public expenditure until 1957. So, in terms of current peseta, public expenditure in 1957 (41,836 million) was seven times the 1940's one (6,241); however, in constant peseta of 1901, the growth (2,146 in 1940; 2,854 in 1957) is not impressive (13 per cent). The public spending real growth in Spain began in 1965 both in monetary and real terms. In current peseta the government spending in 1973 is 12 times higher than in 1957, and in constant peseta the ratio is 5 to 1.

The question would have gone answered were it not for the very fact that neither theories (Wagner, 1967; Peacock and Wiseman, 1961) explaining public spending growth fits well in the Spanish case. Let us see why:

- (1) Wagner (1967, pp. 1-24) – constant forces are working to push up public expenditure, through two different ways:
 - private action is replaced with public one in sectors demanding strong capital investment, with long-term repayment; where the exclusion principle does not work (public works, railroads, postal service); and
 - the emergence of new social needs, which can only be provided by the government (defence, justice, education, health, welfare).After the throughout research conducted by Lagares (1975, pp. 19-33), it is not possible to apply such a scheme to Spain.
- (2) Peacock and Wiseman (1961) – this growth is the outcome of isolated facts, such as wars, economic depressions and the like. Holcombe (1995, p. 28) establishes that government expenditure “ratchets up” in response to crises such as wars and depressions, and after the crises pass, never falls back down to its old level. But ratchets do not explain the long-term upward trend of government expenditures in the twentieth century. It was the first empirical setback to Wagner’s theory. The public spending remains level if those events disappear.

The ratchets hypothesis affirms that public spending holds back during social peace periods because the fiscal burden does not allow to carry out all desired outlays, and remains stable in these times; only social unrest can make the fiscal pressure go up until the amount thought to be necessary to pay for the desired expenditures (see also Holcombe, 1993). The new tax level reached after the war ratchets once the conflict is over which enables to maintain a higher public spending than before; but when it climbs up the fiscal ladder it is rather difficult to undo the way.

Much the same is true of Spain at least until 1951. A substantial amount of the increased public spending was directly war-related, but delayed by the 1940-1951 economic crisis. There was no ratcheting up after the SCW: 15 per cent of public expenditure as a percentage of GNP in 1935, then 10 per cent by 1950-1960. Spain catches up in 1965. But public expenditure as a percentage of GNP flattens along this period: 14.3 (1935) to 13.7 per cent (1940); 15 (1945), 10.4 (1950), 8.6 (1951), 9.6 (1955), 13.5 (1960), 16.8 (1970), 16.3 (1972). Until 1976 it does not recover the level of 1935.

In terms of public spending’s increase/decrease until 1951 the bad years are more common: 1940 (it goes down 24 per cent); 1941 (19); 1946 (15); 1951 (8). Thereafter, we see a steady growth with very good years: 1954 (increasing 12 per cent); 1956 (18); 1958 (25); 1959 (15); 1962 (26); 1966 (18).

It is a well-known phenomena that democratic governments are prone to interest group politics that makes governments inefficiently large. In the Franco regime's case the model to be applied is the one of autocracies: dictators who expect to remain in power for a long period of time will maximise their utility function enforcing the property rights and the long term contracts among the citizens. To put it mildly, Franco is one of them. On this issue, it is worthwhile to read again the work of Tullock on Autocracy, and the Olson's robber model of dictatorship.

Evolution of central budget

To see how veterans groups were able to organise to capture those transfers, some background on the central budget before the Civil War is useful. Historical events which affect the budget's magnitude and structure includes the Morocco War, Spanish Republic II, and the Civil War. Veterans of the SCW are the advanced interest group to gain enough political power to bring about a major increase in direct monetary transfers to group members. They produced the political atmosphere for new pressure group to succeed in this capture of central payments. It is worthwhile to analyse how the increase of central outlays splits among the different items making up the central budget (see Table III).

Regarding public expenditures we consider two phases: 1939-1959, and 1958-1975. Let us leave aside the Republican period (1931-1939) when a number of public works were performed to tackle the unemployment problem, neglected until then. The new ideas about government tasks was reflected in a slight budget change:

- *1939-1959: public finance moving backwards* (Comin, 1988, p. 79). The item Fomento receives 25 per cent of the total budget during 1930-1935, a figure not reached again until 1958-1964. After the deep economic recession (1940-1951) the country suffered a decade of foolish autarchy. The war and subsequent reconstruction enhanced the expenditure. Progressive items such education, health, pensions or infrastructure lagged behind that of almost every other one (in fact, they fell from 8 per cent in 1946 to 5 per cent by 1958). In depression era (1940-1960) the entry pensions remains unchanged (5 per cent); later on, it went up to 12 per cent in 1965-1972.
- *1959-1975: modern public finance*. It came with more open-minded cabinets and a new venue in politics with the technocrats, a group of academics who entered the political arena to speed the country's development. The starting point is the 1959 stabilisation plan. On public spending, Wagnerian forces work along this plans (structural trends lifting it up) with a recovery and updating of public expenditure.

Year	Debt	Wages	Services	Defence	General	Services	Fomento	Pensions	Education
1930-1935	22	33	17	17	13	21	25	7	6
1940-1945	13	33	30	39	14	14	17	5	4
1946-1951	15	37	26	33	14	14	20	8	5
1952-1957	14	39	26	32	17	19	24	7	7
1958-1964	8	32	11	20	14	27	29	5	7
1965-1972	3	37	8	14	11	33	44	12	12

Table III.
Public expenditure
structure (percentage
average in relation to
total spending)

As a conclusion, veterans' compensation and pensions were the earliest major Spain transfer programme, and veterans formed a powerful interest group, so they were able to maintain generous benefits through the political process.

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Socioeconomic analysis of the determinants of TANF recipients in the USA and policy implications

TANF recipients
in the USA

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Keywords *Social welfare, Unemployment, United States of America, Social economics, Government policy*

Abstract *The dramatic decline in the number of welfare recipients in the USA is examined. The unique features of this article include the use of time series data, the consideration of different welfare benefits and socioeconomic variables, and the application of the generalized autoregressive conditional heteroskedasticity model. Finds that less benefits including cash, food stamps, and Medicaid, lower percentage of births to unmarried mothers, lower dropout rates, lower unemployment rates, more budgets for administrative expense, and welfare reform are expected to reduce welfare caseloads. If the recent unemployment rate of 6.1 percent persists for one year, welfare caseloads would rise by 525,300 from the year 2000 level, holding other factors constant.*

Introduction

In 1996, US Congress passed the Welfare Reform Act and replaced the Aid to Families with Dependent Children (AFDC) program with the Temporary Assistance for Needy Families (TANF) program. It provides financial assistance to qualified recipients due to the death, continued absence, incapacity, or unemployment of the parent. Income, assets, and the age of the children are basic criteria for determining eligibility and cash benefits that are time-limited up to a maximum of five years. Adult recipients with a child one year or older will be required to participate in the work, training, or education programs that are designed to help recipients gain the experience needed to find a job and become self-sufficient. To help recipients and strengthen the welfare program, the government provides subsidized child care, transportation service, programs to foster two-parent families, bonuses to reduce out-of-wedlock births, awards to high performing states with relatively high job entry rates, drug abuse rehabilitation, pregnancy prevention, child support enforcement, adoption, foster care, kinship care, protective services, emergency services, and others. On the other hand, sanctions may be used to those who do not participate in the work activity. A mandatory agreement of personal responsibility emphasizes self-sufficiency. As a condition of eligibility, TANF children are required to attend schools. Due to a loss of income or a delay in receiving income, TANF-diversionary assistance allows TANF eligible families to receive a one-time benefit of up to 120 days in a five-year period to assist them in mitigating immediate problems.

Figure 1 shows the number of welfare recipients in thousands during 1979-2001. It rose from 10.3 million in 1979 to 14.2 million in 1994 and then declined substantially to 5.4 million in 2001. The decline occurred before the passage of the Welfare Reform Act



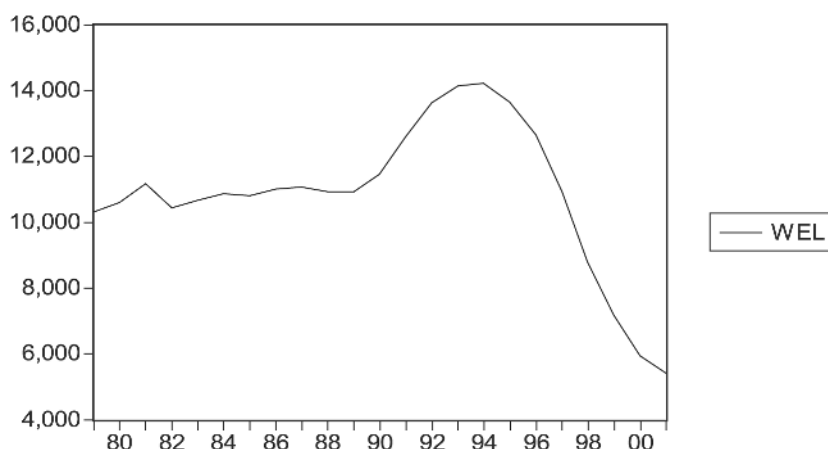
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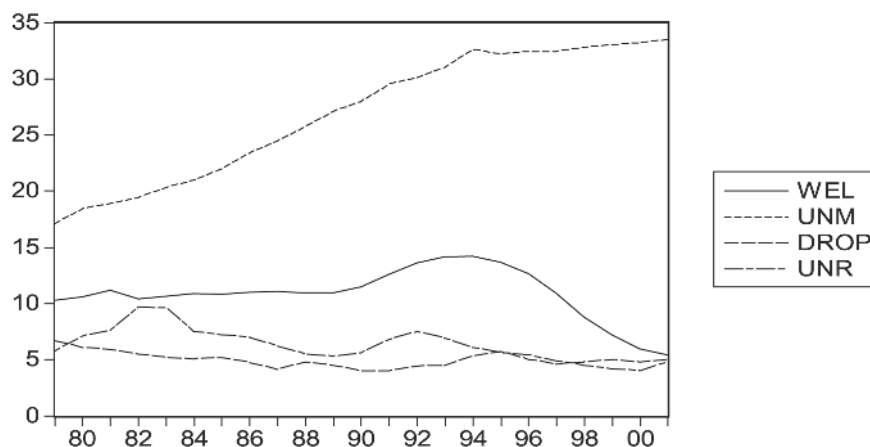
Figure 1.
Number of welfare
recipients in thousands:
1979-2001



in 1996. Figure 2 shows the figures of welfare recipients in millions (WEL), the dropout rate (DROP), the unemployment rate (UNR), and the percentage of births to unmarried mothers (UNM) during 1979-2001. As shown, dropout rates declined from 6.7 percent to 5.0 percent, percentage of unmarried mothers rose from 17.1 percent to 33.5 percent, and the unemployment rate declined from a high of 7.5 percent in the 1990s to a low of 4.0 percent in 2000 and went up to 4.8 percent in 2001. As shown, the first three variables moved in the similar direction whereas the percentage of unmarried mothers trended in the opposite direction, suggesting that the educational and economic factors probably outweighed the percentage of unmarried mothers in reducing welfare rolls.

Scholars have continued to inquire how changes in some socioeconomic variables and the public policy would affect welfare participation and to estimate their magnitude for policymakers to evaluate the welfare program. This article attempts to determine how monetary, educational, demographic, macroeconomic, public policy and other factors would affect welfare rolls. This paper has several unique features. First, welfare benefits include not only cash benefits, but also food stamps and Medicaid. The

Figure 2.
Selected variables over
time: 1979-2001



consideration of these different benefits would avoid measurement errors. Second, several socioeconomic variables are considered. They include the percentage of unmarried mothers, the high school dropout rate, and the unemployment rate. These variables represent the marital status, educational achievement, and the general economic condition. The inclusion of these variables allows us to estimate the impact of the change in one of the variables while controlling for other variables. Third, few of the previous studies used time series as a sample and may not capture the changes over time. The author applies the well-known generalized autoregressive conditional heteroskedasticity model (Engle, 1982, 2001; Bollerslev, 1986) in that error variance in the regression is postulated to be a function of past squared errors and past error variances.

Literature survey

There are several major studies including the information after welfare reform and estimating the impacts of the macroeconomic condition, waivers, and/or welfare reform. The Council of Economic Advisers (1999) estimated that the share of caseload changes due to the unemployment rate, waivers, and TANF was 8 percent-10 percent in 1996-1998, 12 percent-15 percent in 1993-1996, and 35 percent-36 percent in 1996-1998, respectively. Wallace and Blank (1999) found that the share of caseload changes due to the unemployment rate, waivers, and TANF was 8 percent-10 percent in 1994-1998, 26 percent-31 percent in 1994-1996, and 28 percent-35 percent in 1997.1-1998.6, respectively. Grogger (2000) reported that TANF and waivers have the same negative impacts on participation and lead to a 2.1 percent decrease in welfare rolls, holding other variables constant. Schoeni and Blank (2000) showed, among other things, that TANF has a small impact on household structure, earnings and poverty rates, TANF reduced welfare rolls significantly, and waivers have affected welfare participation, labor market involvement, earnings, poverty rates and marital status.

In a recent symposium sponsored by the Federal Reserve Bank of New York, Blank (2001) compared the impacts between the general economic condition and welfare policy change. She revealed that about 50 percent of caseload reductions are attributable to the better economic condition and welfare reform beginning in 1996 and that welfare caseloads would decline by 6 percent if the unemployment rate drops by 1 percent. According to the findings by Moffitt and Stevens (2001), a higher unemployment rate raised welfare recipients who are more educated, whites, and less than 25 years old and reduced welfare recipients with the number in family. Welfare reform has reduced the number of beneficiaries who never married and increased the employed over the year, annual weeks worked, hours worked per week, and annual earnings. There was little evidence to support the claim that welfare reform would end caseloads based on more or less education. Based on a sample of 120 intermediaries and other data, Pavetti *et al.* (2001) reported that some welfare agencies relied on many intermediaries and others may use just one, that we should underline the importance of intermediaries in linking welfare recipients to jobs, and that there was little evidence that these intermediaries only helped the most capable females get jobs. Using New York City as a sample and comparing statistics during 1994-1995 and 1997-1998, Chernick and Reimers (2001) found that the recipients of welfare cash benefits and food stamps dropped by 33 percent and 15-17 percent, respectively. Medicaid recipients changed little. Therefore, they concluded that no large decrease in

recipients who received benefits at least from one of the programs. Based on a sample of three pilot projects, Robins and Michalopoulos (2001) suggested that it would be effective if a welfare recipient is required to work at least 30 hours per week in order to receive assistance.

Other recent studies based on more recent data and with different focuses provide additional insight into the subject. Gittleman (2001) focused on the net change and the flows out of and into welfare rolls. He found that the decline in welfare rolls before the 1996 Welfare Reform Act was attributable to a decreasing rate in initial entry, a shorter welfare spells, and a decline in the repeated recipients and was not correlated with the waivers. According to Kaushal and Kaestner (2001), welfare reform reduced caseloads of less educated unmarried women by 28 percent since 1994. These women worked an average of 29 hours per week. There was little evidence that welfare reform reduced the fertility rate of these women.

Danziger *et al.* (2002) showed that welfare leavers experienced a higher income, pursued fewer outside activities, expected less hardship, and maintained a similar material standard. He estimated that welfare recipients received an additional net income of \$2.63 by working an additional hour and that the work effort resulted in an income difference of 60 percent between the working and non-working recipients. Bavier (2002) employed the Survey of Income and Program Participation (SIPP) as a sample and found that welfare reform has produced positive effects on jobs, earnings, and poverty for families headed by women with children. He concluded that the results are consistent with those using the Current Population Survey (CPS). Kaestner *et al.* (2003) used the sample of the National Longitudinal Surveys of 1979 and 1997 to determine whether teenagers' behaviors have changed. They showed that welfare reform has reduced teenage welfare benefits, fertility, and marriage and increased the probability for teenage mothers to move in with their parents. Grogger (2003) employed the sample of the CPS to evaluate the impacts of time limits, the earned income tax credit (EITC), and other changes on welfare rolls and other areas. He revealed that the five-year time limit explains about 12.5 percent decline in welfare rolls and 7 percent increase in total employment, and has little impact on income. The EITC also has effects on reduced welfare participation, increased employment, the supply of labor, and income. Blank (2003) reviewed the possible application of the US welfare reform to Europe and indicated that an effective program should have positive and negative enticements, emphasize jobs and training, and provide other supportive services such as child care, transportation, counseling, etc.

Meyers *et al.* (2001) focused their study on the impact of welfare reform on child care cost based on the data for New York. They indicated that child care cost would rise a great deal and families would shoulder most costs and that after adjusting for the costs of child care, most families headed by single mothers are still poor. LeRoy and Johnson (2002) criticized welfare reform on the grounds of badly trained welfare workers, insufficient child care, inadequate public transportation, temporary jobs for welfare mothers with little benefits and low wages, etc. Bartik (2002) showed that there are considerable displacement effects. The labor supply policy has a high displacement effect when a state has a high unemployment, and the labor demand policy has a high displacement effect when a state has a low unemployment.

Theoretical model

Based on previous studies and economic theory, the number of welfare recipients can be expressed as:

TANF recipients
in the USA

$$\text{WEL} = \beta_0 + \beta_1 \text{BEN} + \beta_2 \text{MED} + \beta_3 \text{UNM} + \beta_4 \text{DROP} + \beta_5 \text{UNR} + \beta_6 \text{ADM} + \beta_7 \text{B97} + \beta_8 \text{B98} \quad (1)$$

where: WEL = number of welfare recipients; BEN = welfare benefits; MED = amount of Medicaid per dependent child; UNM = percentage of births to unmarried women; DROP = the dropout rate; UNR = the unemployment rate; ADM = welfare administrative expense; B97 = a binary variable equal to 1 if year = 1997, otherwise B97 = 0; and B98 = a binary variable equal to 1 after year 1997, otherwise B98 = 0.

We expect that the number of welfare recipients and the right-hand side variables have the following relationships:

$$\beta_1 = \partial(\text{WEL})/\partial(\text{BEN}) > 0,$$

$$\beta_2 = \partial(\text{WEL})/\partial(\text{MED}) > 0,$$

$$\beta_3 = \partial(\text{WEL})/\partial(\text{UNM}) > 0,$$

$$\beta_4 = \partial(\text{WEL})/\partial(\text{DROP}) > 0,$$

$$\beta_5 = \partial(\text{WEL})/\partial(\text{UNR}) > 0,$$

$$\beta_6 = \partial(\text{WEL})/\partial(\text{ADM})?,$$

$$\beta_7 = \partial(\text{WEL})/\partial(\text{B97}) < 0,$$

$$\beta_8 = \partial(\text{WEL})/\partial(\text{B98}) < 0.$$

When welfare benefits such as cash, food stamps, Medicaid and others increase, it would be more attractive to join or continue staying on welfare rolls. As out-of-wedlock births rise, it would be more likely for unmarried mothers to become welfare recipients due to the single-mother status and the inability to work by taking care of newly born babies. High school dropouts have a greater probability to be unemployed, experience financial hardships, and receive welfare benefits if they meet the requirements. A higher unemployment rate tends to raise the number of welfare recipients due to layoffs, broken families, and financial suffering. Some maintain that welfare caseloads could be reduced given more budgets to hire more administrative workers. Others argue that more budgets for caseload workers would reduce their productivity. The author considers two different binary variables for welfare reform mainly because it took time for the participants to develop guidelines, explore the opportunity, train caseload workers, apply for funding, and make adjustments under the new law. Blank (2002) provides a detailed analysis of the relationship between welfare recipients and some of these explanatory variables.

Empirical results

The sample consists of annual data during 1979-2000. Earlier or more recent data for some of the variables are not available. BEN consists of the benefits for cash and food stamps. They are separated from the Medicaid benefit to measure potential different impacts. WEL, BEN, MED, UNM, and ADM came from US Department of Health and Human Services. DROP was taken from US Department of Education. UNR was taken from US Bureau of Labor Statistics. The CPI is used to derive real values.

The OLS regression is presented first in Table I. The eight right-hand side variables can explain approximately 96.9 percent of the variation in the number of welfare recipients. The Durbin-Watson d statistic has a value of 2.44. Compared with $D_U = 2.407$ and $4 - D_U = 3.412$, we cannot reject the null hypothesis of the absence of positive or negative autocorrelation. BEN has a positive sign but the coefficient is insignificant at the 10 percent level. MED has the expected sign but the coefficient is insignificant at the 10 percent level. The coefficients for other variables have the expected signs and are significant at the 5 percent or 10 percent level. Welfare recipients would decline with a lower percentage of births to unmarried mothers, lower dropout rates, lower unemployment rates, and more budgets for welfare caseload workers. Due to welfare reform and the policy change, the number of welfare beneficiaries declined by 2.8 million in 1997 and decreased by 5.3 million during 1998-2000.

The estimated regression based on the GARCH(1,1) model is reported in Table II. In the variance equation, residual variance is a function of past squared residual and past residual variance. Higher orders of GARCH(p,q) were tested and found insignificant. As shown, the right-hand side variables can explain approximately 96.4 percent of the variation in the number of welfare recipients. All the coefficients have the expected signs and are significant at the 1 percent level. If BEN and MED rise by \$1, welfare rolls will increase by 50,000 and 2,800, respectively. Because of the significant difference in the coefficients, the separation of BEN from MED is justified. A one percentage point increase in the percentage of unmarried mothers would raise welfare rolls by 248,900. A one percentage point increase in the national unemployment rate would cause welfare recipients to go up by 250,100. A high dropout rate has a very damaging effect on welfare rolls. More funding for caseload workers would reduce

Variable	Coefficient	Std error	<i>t</i> -statistic	Prob.
C	-3,322.253	9,149.040	-0.363126	0.7223
BEN	55.26254	41.00439	1.347722	0.2008
MED	13.28408	45.29359	0.293288	0.7739
UNM	293.2565	138.2514	2.121183	0.0537
DROP	662.4795	224.1343	2.955726	0.0111
UNR	239.6651	127.7647	1.875832	0.0833
ADM	-25,371.15	5,442.620	-4.661569	0.0004
B97	-2,755.094	824.6787	-3.340809	0.0053
B98	-5,295.616	939.0611	-5.639266	0.0001

Notes: Dependent variable, WEL; method, least squares; sample (adjusted), 1979-2000; included observations, 22 after adjusting endpoints. R^2 , 0.969202; mean dependent var., 11,089.09; adjusted R^2 , 0.950249; SD dependent var., 2,019.980; SE of regression, 450.5547; Akaike info. criterion, 15.35092; sum squared resid., 2,638,994; Schwarz criterion, 15.79726, log likelihood, -159.8602; F -statistic, 51.13787; Durbin-Watson stat., 2.441339; prob. (F -statistic), 0.000000

Table I.
Estimated OLS
regression of welfare
recipients

	Coefficient	Std error	z-statistic	Prob.
C	-2,548.063	2,047.036	-1.244758	0.2132
BEN	50.03399	10.98504	4.554738	0.0000
MED	2.819977	1.062738	2.653500	0.0080
UNM	248.9484	31.25821	7.964258	0.0000
DROP	635.2561	67.47699	9.414410	0.0000
UNR	250.1257	27.06463	9.241792	0.0000
ADM	-24.57591	1.815745	-13.53489	0.0000
B97	-2,166.580	579.4182	-3.739233	0.0002
B98	-5,438.994	291.6918	-18.64637	0.0000
<i>Variance equation</i>				
C	92,400.26	41,006.20	2.253324	0.0242
ARCH(1)	0.718773	0.216480	3.320265	0.0009
GARCH(1)	-0.372721	0.211888	-1.759045	0.0786

Notes: Dependent variable, WEL; method, ML-ARCH (Marquardt); sample (adjusted), 1979-2000; included observations, 22 after adjusting endpoints; failure to improve likelihood after 57 iterations; Bollerslev-Wooldrige robust standard errors and covariance; Variance backcast, off. R^2 ; 0.963888; Mean dependent var., 11,089.09; adjusted R^2 , 0.924166; SD dependent var., 2,019.980; SE of regression, 556.2627; Akaike info. criterion, 15.27217; sum squared resid., 3,094,281; Schwarz criterion, 15.86728; log likelihood, -155.9939; F -statistic, 24.26541; Durbin-Watson stat., 2.488402; prob. (F -statistic), 0.000010

Table II.
Estimated GARCH
regression of welfare
recipients

welfare rolls. The Welfare Reform Act reduced the number of welfare recipients by 2.2 million in 1997 and 5.4 million during 1998-2000. Because the coefficients for B97 and B98 are statistically different, the use of two binary variables is appropriate.

Summary and conclusions

In this study, the author has attempted to examine the factors that accounted for the substantial decline in the number of welfare recipients mainly due to the 1996 Welfare Reform Act. Welfare cash benefit, food stamps, and Medicaid are included in the regression analysis. The educational, demographic, macroeconomic, and administrative variables are considered. Major findings can be summarized as follows. The GARCH model yields better outcomes than the OLS method mainly because of more advanced specification of error variance. If OLS is used, we may draw a misleading conclusion that welfare cash benefit, food stamps, and Medicaid are insignificant in affecting welfare rolls. In the GARCH model, fewer welfare rolls are associated with smaller cash benefits, lesser food stamps, smaller amount for Medicaid, lower percentage of unmarried mothers, lower dropout rates, lower unemployment, and more budgets for caseload workers. The policy change in the Welfare Reform Act reduced welfare rolls by 2.2 million in 1997 and 5.4 million during 1998-2000.

There are several policy implications. We need to include major welfare benefits such as cash benefit, food stamps, Medicaid, and other aids in evaluating the impacts on welfare participation. A successful welfare program is highly affected by the quality of education to reduce school dropouts and the reduction in the births of unmarried teenage mothers. The general economic condition also influences the outcome. The recent sluggish economy has raised welfare recipients and made the implementation of job requirement more challenging. If the current unemployment rate of 6.1 percent as of September 2003 continues and persists for one year, it is estimated that the number of

welfare recipients would increase by 525,300 from the year 2000 level, holding other variables constant. To reduce caseloads, more resources are needed. However, the huge federal budget deficit would make the request for an increase in caseload administrative budget more difficult.

There may be areas for further research. The sample may be extended in order to have more observations and reduce the estimated standard error. Welfare benefits may be defined and measured differently. Because of a high degree of multicollinearity and the sample size, how to estimate welfare benefits separately would be a challenging empirical work. Other macroeconomic indicators may be tested. If the sample size becomes large, a test for cointegration (Engle and Granger, 1987) may be considered.

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The Malthusian physiognomy of Nazi economics

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Abstract *The Nazi economic recovery, achieved between 1933 and 1938, displayed striking features of brilliant economic overhauling of a capitalist machine that had been plagued by a prolonged crisis. The means employed to effect the recovery appear to follow a Malthusian exercise in the rehabilitation of the function of effective demand: the Nazis, prompted by expediency and necessity, took remedial action that was very much in consonance with the canons of classical political economy. The succinct analysis of such an exercise in the context of the strong governmental regimentation of the Third Reich may provide insight into the nature and future of the capitalist regime, in the light of the fact that its principles, business and philosophical, and its implications for the world at large, so far, have not shown a marked departure from the way in which they were understood by the spirit of the 1930s, in Germany, as well as abroad.*

Introductory

Despite the 50-year long systematic, and by and large successful, endeavor of the western scholars of the humanities and the social sciences to isolate or, better still, to resect the Nazi episode from any traditional strain of thought and intellectual experience pertaining to that corpus of ideas and spiritual appetites that is commonly and loosely captioned as “Liberalism”, there remains lingering in any reader, willing to peruse, even cursorily, a few of the chief economic tenets of National Socialist propaganda, a vague suspicion that several important articles of faith of the Third Reich share more than an uncouth similitude with some of the most respected principles of classical political economy.

In other terms, for as much as the academic authorities of the victorious powers (of the Second World War) have striven to present the Hitlerite manifestation as an eerie “German” aberration, born out of unfortunate circumstances beyond the power of man and of the non-German-speaking West, and as such, utterly foreign to the democratic and business liberties of the Anglo-Saxon world, it is nevertheless a matter of some difficulty to deny the palpable affinities between the beliefs and practices enacted under the watch of the Nazi economic ministries and the axioms and prescriptions envisioned at least a century earlier by the nascent currents of classical economics.

In truth, this is scarce a matter of controversy, for it is sufficiently known that Germany, during the Second Reich and the Weimar era, had erected her industrial apparatus in close collaboration with the western powers, and thus the vicissitudes of this industrial machine could not but mimic those of regimes endowed with similar infrastructure. In this sense, the policies adopted and the concerns voiced by the economic authorities of the Nazis bore by necessity a striking semblance to those of their European and American counterparts.

Furthermore, it is as such, that is, as a mere connection occasioned by the adoption of nearly identical technological and financial regimes, that the parallel is here drawn between Nazi economics and classical Liberalism. There is obviously no wish to



fashion herein tendentious, and clearly unwarranted, philosophical “links” between the founding fathers of economics and the engineers of the “final solution”.

With hope of having cleared the path of any disagreeable equivocation, one may attempt, in order to support the main contention of the article, to present a mere juxtaposition of Nazi economic imperatives to the well known admonitions of Thomas Malthus, with a view to underscoring their pragmatic compatibility.

A succinct exposition of Malthus’s observations, taken from his 1798 *Essay on the Principle of Population* and his 1836 *Principles of Political Economy*, will be followed by matching instances, as discussed by Hitler or evidenced by the record of the German Recovery, which was consummated between 1933 and 1938 (see Malthus, 1985, 1986).

Malthusian economics

Over-population

The most immediate nexus between Nazi and Malthusian economics is afforded by the notorious theory of over-population. Its outlines are widely known, and a broad reassessment of them is superfluous at this stage. Incidentally, it may be remarked that Malthus’s 1798 *Essay on the Principle of Population* is not infrequently drawn forth as an exemplary case of plagiarism, the plagiarized work being Venetian thinker, and Benedictine monk of the order of Camaldoli, Giammaria Ortes’s 1774 *Riflessioni sulla popolazione delle nazioni per rapporto all’economia nazionale* (*Considerations on the Population of Nations in Relation to the National Economy*) (Ortes, 1965). Although such a claim cannot be scrutinized at length here, suffice it to say that Malthus’s main hypotheses on the dynamics of growth and procreation appear to be drawn verbatim from the initial chapters of Ortes’s book. Malthus (1985, pp. 70, 71, 143, 102, emphasis added) poses the problem thus:

I think I may fairly make two postulata.

First that food is necessary to the existence of man. Secondly, that the passion between the sexes is necessary and will remain nearly in its present state . . . Assuming then my postulata as granted, *I say*, that the power of population is indefinitely greater than the power in the earth to produce subsistence for man . . . When these two fundamental laws of society, the security of property, and the institution of marriage, were once established, inequality of conditions must necessarily follow . . . It has appeared, that from the inevitable laws of our nature some human beings must suffer from want. These are the unhappy persons, who, in the great lottery of life, have drawn a blank . . . To prevent the recurrence of misery, is, alas! beyond the power of man.

The theory contends that mankind grows according to a geometrical ratio[1], whereas food and the means of subsistence can only be wrested from the soil in arithmetical progression (Malthus, 1985, chapter 2).

Malthus says: as Peter Kropotkin, “the anarchist prince”, had argued nearly a century ago, “Political economy never rises above the hypothesis of a limited and insufficient supply of the necessities of life; it takes it for granted” (Kropotkin, 1993, pp. 159-60). The Malthusian teaching is, as a rule, postulated, and seldom is it accompanied by lengthy surveys on the state and techniques of cultivation affecting the communities under investigation. Neither Ortes or Malthus provide any description of the types or the magnitude of the areas brought under tillage for the provision of foodstuffs, in relation to the inhabitants. Such a teaching is more of the nature of the two postulata upon which Malthus alleges to have deduced it – it is a given.

The principles of political economy

The second book of the principles has as its main object the stimuli that are required to for the “continued increase of wealth”. Base and foundation of a prosperous state is, according to Malthus (1986, p. 315), security of property:

Security of property, without a certain degree of which, there can be no encouragement to individual industry ...

Supply. In order to increase wealth, argues Malthus, four main causes are generally identified: an increase in population; the accumulation of capital; the fertility of the soil; and inventions to save labor. The first one, on account of the thesis presented in the above-mentioned essay, he immediately dismisses[2].

The second cause broaches the question of effective demand, which has gained Malthus official tenure in the constellation of the “classics”. The argument behind such a notion is fairly intuitive, in that it simply states that, owing to profit and overhead, which are integral components of the overall value of production, wage-earners cannot afford to pay the price of their produce – in other words, the sum of all wages falls short, by definition, of the overall value of production. And the wealthy classes, who have the power to square the macro-economic equation, do not possess the will to consume to the extent necessary to prevent the accumulation of gluts. Should they add to their capital, and thereby scale up production, they would only worsen the situation by driving an ever growing wedge between demand and supply – the upshot is abundance, which signifies decreasing prices, which, in turn, represent the greatest menace to the going capitalizations of business concerns[3].

As for the fertility of soil, Malthus makes use of Humboldt memoirs on New Spain[4] to argue that great fertility of soil may go hand in hand with utter destitution amongst the farming masses, and “that the deficiency of wealth in a fertile country may be more owing to want of demand than to the want of capital; and, in general, that the fertility of the soil alone is not an adequate stimulus to the permanent increase of wealth” (Malthus, 1986, p. 351).

Fourth, the substitution of newer for obsolete methods of production is viable so long as the economy would allow a swift re-employment of the displaced capital at an undiminished rate of profit, which occurrence, Malthus believes, “appears to be contradicted by general experience”. But in the end, the true arbiter of commercial success can only be the demand occasioned by the market – the difficulty lies not in manufacturing the goods, but in supplying them at a price that cover interest, operating costs and the highest obtainable rate of profit, all other considerations are immaterial.

For Malthus, the powers of production alone are not the true ministers of wealth, for “something else seems necessary in order to call these powers fully into action”. This “something else” is “an effectual and unchecked demand for all that is produced” (Malthus, 1986, p. 361). Therefore, a cohort of consumers is the indispensable requirement for an efficient business enterprise, be it national, or private.

Accepting these premises leads to the anxious desire to secure the extension of markets and new avenues of commerce. They must be “opened”, somehow.

Demand. Thus, if demand is indeed the decisive element, one must seek the causes most favorable to the increase of value (for the purpose of business is pecuniary gain) that depends upon distribution. Malthus identifies three such causes: the division of landed property; internal and external commerce; and the maintenance of an adequate

proportion of the society employed in personal services. Or otherwise entitled to make a demand for material products without contributing directly to their supply.

As was the case in New Spain at the time of Malthus or in the England of yore, a society formed by clusters of very large proprietors surrounded by multitudes of very poor sharecroppers, “presents a distribution of property most unfavorable to effectual demand” (Malthus, 1986, p. 373). In such an environment large classes of merchants are unable to ply their trade. It then became necessary to break down large estates, and fashion a consuming gentry. Yet, if highly concentrated wealth is an economic evil, an equitable apportionment of wealth across society is to Malthus (1986, p. 376) no less pernicious for:

With an excessive proportion of small proprietors both of land and capital, all great improvements on the land, all great enterprises in commerce and manufactures, and most of the wonders described by Adam Smith, as resulting from the division of labour, would be at an end.

So it appears that the gifted ones, amongst those who did not draw a blank in the great lottery of life, were so endowed as to make accumulation at all possible: an unequal distribution of wealth, as Ortes understood, is the *sine qua non* of capital accumulation[5].

The urge to expand markets at home and abroad – the second cause – is, again, one dictated by the necessity to obtain a high price. The gauge of all business success, which is carried on a pecuniary footing and, as such, concerns itself exclusively with gain accounted for in bookkeeping records, is the currency of the nation – with it the merchant reckons failure or success; it is the bottom line of business enterprise, the alpha and the omega of capitalist pursuit. Ignoring its oscillations defeats the purpose of careless planning in the launching of any profitable venture. Thus, internal and external demand is a *sine qua non* for the “increase of value” of a nation, so long as proper supervision is be devoted to the management of the monetary system.

But, should the access to such foreign bounties be too hard to secure, and should the internal market reach a level of saturation so high as to render any addition to capital an unwarranted act of accumulation conducive to decreasing prices, which defeat the whole purpose of business, there but remains one secure, never-failing option available to shore up the capitalizations of the jeopardized concerns and that is the third, and most important, cause favorable to the increase of value identified by Malthus, namely, the creation of a class of unproductive consumers[6].

The solution is thus to create the stimulus to demand by fashioning a class of consumers, who must not be involved in the productive process, for as employees they would figure in the accounts as an addition to costs, but who derive sustenance from the revenue of capital – a breed of individuals thriving off the gains of business by providing services to the community in exchange for such allowance. An army of flunkies, white-collar workers, lawyers, state officials, bureaucrats of all denominations, and soldiers of all ranks. This class of unproductive consumers is the modern re-edition of the retainers of yore; they are the courtesans that feed off the revenues of the masters[7].

Indeed, they are important if they can pay the price of all commodities for sale. Now, it is not conceivable that the captains of business will allow to be taxed to the extent necessary to sell the whole of the national product, for whatever they refuse to spend makes up their income proper, namely profit. It follows that the “master producers” would have to surrender profit entirely to state employees in order to prevent the piling up of unsold goods, that is, gluts. This, of course, does not happen; in fact, only part of

the income of the producing class is relinquished to the state in the form of taxation; whatever the state cannot afford to purchase it will borrow from the wealthy, and this is how the dynamics of the national debt is triggered[8].

Debt is thus found to be beneficial to business, though the incumbency to levy taxes upon the community to honor interest payments presents a limit to financial abuse, and makes the whole enterprise an exercise of fine calibration – a juggling of mounting financial claims to be set against the active spending of a rising class of state retainers. The viability of a capitalist system thus appears to be dependent, at least provisionally, upon a nondescript ratio – “a certain proportion”, says Malthus (1986, pp. 412-13) – of wage earners to unproductive consumers, which, beyond guaranteeing “the greatest value”, should keep the economy from keeling over for lack of either ineffective demand or swelling indebtedness.

Nazi economics

Over population

Whereas the classics – Ortes and Malthus – recommended *il celibato* (celibacy) and abstinence (“preventive check”) as a sensible restraint of the powers of procreation, the Nazis, though they shared a similar apprehension as to the catastrophic effects of a population swarming over constricted, and allegedly ungenerous, soil, actively encouraged the husbanding of prolific households: the hordes of invasion must be numerous. In thought, the premises were identical – births, according to the drift of the postulated law of nature, exceed produce; the difference lay in policy: the classics recommended prudence, the Nazis conquest:

The essential thing for the future is to have lots of children . . . A family’s life is assured only when it has upwards of four children – I should even say, four sons . . . It is inconceivable that a higher people should painfully exist on a soil too narrow for it . . . We painfully wrest a few meters from the sea, we torment ourselves cultivating marshes, and in Ukraine an inexhaustible soil . . . lies waiting for us . . . According to the laws of nature, the soil belongs to him that conquers it . . . The fact that our people is bursting out of its cramped frontiers [justifies] all our claims to the eastern space (Hitler, 1953, pp. 46, 33, 214).

Similar views are expressed in *Mein Kampf*, which, as known, was dictated to Rudolf Hess, under the influence of Karl Haushofer, who founded after the First World War the geopolitical school at the University of Munich, and who is credited with the paternity of the concept of *Lebensraum* (vital space). The claim to vast expanses of vital space in the East, if taken at face value, dissipated any bafflement at the seeming irreconcilability between the promotion of large families and the cry of distress over the limited nutritive capacity of the Reich: if land was not sufficiently productive at home, foreign soil had to be appropriated by the use of force to give vent to the fertile pangs of the “higher people” (Dorpalen, 1942, p. 59). To Malthus, colonizing luscious virgin territory amounted to but a postponement of the natural check of the soil on human fertility; famine, vice and war would have ensued thereafter. With which prophecy Hitler would have not taken issue, for the Nazi élite held a deep belief in the cycle of natural selection, through the fire of the struggle for survival, and were thus prone to submit themselves to such a struggle and thereby assume the risks to prove its eternal validity:

Germany has an annual increase in population of nearly 900,000 souls. The difficulty of feeding this army of new citizens must grow greater from year to year and ultimately end in

catastrophe, unless way and means are found to forestall the danger of starvation and misery in time (Hitler, 1971, p. 131).

Hitler enumerates four remedies for averting the “danger of misery and starvation”. The first is the artificial restriction of births, Malthus’s “preventive check”. The practice, argues Hitler (1971, p. 132), would ultimately corrupt the breed of men that have steeled themselves in the strife for existence:

The natural struggle for existence which leaves only the strongest and the healthiest alive, is obviously replaced by the obvious desire to “save” even the weakest and most sickly at any price . . . Man limits procreation, but is hysterically concerned that once a being is born it should be preserved at any price . . . This plants the seed of a future generation which must inevitably grow more and more deplorable.

The second palliative is internal colonization. Here Hitler (1971, p. 133) reaches conclusions already detailed at length by Malthus in identical terms[9]:

Without doubt the productivity of the soil can be increased up to a certain limit, . . . not continuously without end . . . With utmost toil it will not be possible to obtain any more from [the soil], and then, though postponed for a certain time, catastrophe again manifests itself. First there will be hunger from time to time, then famine, etc.

This process, continues Hitler, will bring forth a fortified strain of beings that are, however, bound to commit the same mistake, should they decide to preserve the “weak at any cost”. Moreover, a huddling of valiant creatures on a limited surface will give much breathing room and space to reputedly “inferior races”, and thus irresponsibly grant these races, in time, the opportunity to overrun the German people.

The third envisaged solution is the conquest of new soil in the East; the fourth, the capture of foreign markets by means of industry and commerce. After brief reckoning, and the facile apprehension that commercial success abroad is impeded by alien powers of production already plagued by gluts of unsold staples and commodities, the third way, that of conquest, was selected by Nazi authorities as the sole workable option:

If land is desired in Europe, it could be obtained, by and large only at the expense of Russia, and this means that the new Reich must set itself again on the march along the road of the Teutonic knights of old, to obtain by the German sword sod for the German plow and daily bread for the nation. For such a policy there was but one ally in Europe: England (Hitler, 1971, p. 140).

The recovery, 1933-1938

Base and foundation of the economic regime of the Third Reich is security of property:

I absolutely insist on protecting private property . . . I regard it as axiomatic that . . . [a] factory will be better run by one of the members of a family estate than it would be by a state functionary (Hitler, 1953, p. 294).

As he had told Otto Strasser in late 1930, Hitler never thought for a moment of thwarting private initiative, entrepreneurship, or even economic brinkmanship, so long as these traits of economic affection comported with the goals of National Socialism:

Let’s assume, Herr Hitler, that you will become Chancellor tomorrow; what would you do with Krupp? Would you leave that business alone, intact, yes or no?

Certainly yes! Cried Hitler, do you think I'd be so insane as to ruin the great German industry? (Strasser, 1930, p. 128).

Supply. Of the four expedients envisaged by Malthus to increase the wealth of a nation (an increase in population; the accumulation of capital; the fertility of the soil; and inventions to save labor), Hitler, for the reasons outlined above, decidedly discarded the third; he embraced the first, which Malthus rejected, and, like the British economist, set very little store by the second and the fourth remedies. Of this last he says the following in his *Secret Conversations*:

For the few articles that foreigners still need, there's a cutthroat struggle between the suppliers. To gain access to these markets, one must pay such premiums that it represents a disproportionate effort for our economy. Only new inventions sometimes enable us to do a little business (Hitler, 1953, p. 35).

In a world, such as the West of the 1930s, immobilized by redundant capital and international jealousies, commercial and political, open trade is inconceivable. At least among the industrial rivals of Europe and America. Now, to return to the issue, timidly raised by Malthus, of captive markets, if it is "in the power of a people to open foreign markets at will", capital accumulation may be easily countenanced, if not given full swing:

The countries we invite to participate in our economic system should have their share in the natural riches of the Russian regions, and they should find an outlet there for their industrial production . . . Once this region is organized for us, all threat of unemployment in Europe will be eliminated. On the economic level, America could never be a partner for these countries. America could be paid only in gold. A commerce based on the exchange of products is not possible with America, for America suffers from a surplus of raw materials and a plethora of manufactured goods. This gold which the Americans receive in exchange for the labour they supply, they hide it away in their strong rooms – and they imagine the world will yield to this policy born in the smoky brain of a Jewish thinker! The result is their 13 million unemployed (Hitler, 1953, p. 44).

To bring such a plan to fruition, Hitler had to arm Germany first. To arm a country, one needs the performance of the "master producers"; these in turn pretend a remuneration for their collaboration in the form of profits, through guaranteed high prices; to make good on its promise of remuneration to the master producers, the Nazi élite had no avenue to traverse, as Malthus had clearly intuited a century earlier, other than fashioning demand itself.

Demand. It is a matter of notoriety that the so-called "recovery" in Nazi Germany was fueled by government commissions of public works to the private economy. From 1933 to 1935 attention and effort were devoted to the erection of infrastructure, thereafter this consummation took the form of rearmament.

The financial means employed to launch the recovery, under the tutelage of governor Schacht and his team at the Reichsbank, was the bill of exchange. Several types of such bills of various denominations were issued (the most notorious being the "work-creation-" and the Mefo- bills, which roughly punctuated respectively, the building of infrastructure and the manufacture of weaponry), and then handed over to the entrepreneurs, who would discount them at their commercial banks[10].

The money injected by means of discountable work creation bills did not re-flow back to the origin through the process of consumption, for highways, barracks, airdromes, and machine-guns are not consumptibles. It returned, if at all, through the

channels of taxation. The putative advantages of the re-engineered monetary circulation of the Third Reich appeared to consist in what, in fact, was the emission of interest-free loans (after a while the principal loaned to the Reich for rearmament remained unclaimed, and there prevailed the tacit agreement that it should have been repaid after the war would have been won), and the elimination of redundant overhead charges, exacted at each phase of mass production processes.

Via the public works, by having freed an abundant supply of money, Schacht reduced the interest structure of the economy. This much was apparently conceded to the consumer goods industries, as they were not directly involved in rearmament.

In the literature, the repercussion of public spending upon business came to be spoken of as a relationship between “primary” and “secondary” effects on employment. Primary employment accounted for the re-enrolled arms in the sectors directly subsidized by public programs, whereas those additional laborers taken in by consumption industries as a result of the initial state-sponsored boost fell under the caption of “secondary employment”. Students of the depression sought to disentangle from the aggregate trends of the *Konjunktur* the monetary spillovers of “government money” to the consumption sectors, and thereby endeavored to estimate the “increase in wealth” generated by work creation.

Given the rushed warlike proclivities of the Nazis, only a few industries benefited from the primary effects. When full employment was reached in the Spring of 1937, it appeared that these secondary effects had been rather trifling, barring the noticeable increase in the sales of motorbikes and beer – the indisputable, if somewhat limited, sign that, in spite of sweeping controls and decrees, the working class had made a comeback:

German commentators proudly point to substantial rises in production in textiles, beer consumption and private building (though they admit that in general foods and most necessities continue at their enforced law level). The problem can only be solved through decree, since it is nearly impossible to prevent a certain amount of funds from washing over into the hands of those who do not “prefer guns before butter” . . . Industries in which supply is elastic or which could offer a cheaper quality (cigars), or whose raw materials were fostered by the state (petroleum), or which were aided by the public works or rearmament program, naturally expanded production to a relatively high degree . . . German recovery was artificial almost from the first . . . In the first quarter of 1935 production in industries which directly benefited from public works had increased to 213 percent of the 1932 level. Industries not directly affected, on the other hand, increased production to only 123 per cent in the same time . . . Recovery was essentially limited to industries supplying building materials, metals, machinery, and wood, and to those consumers’ industries which were favored by the government for strategic programs . . . To the end of 1934 employment in the textile industry had increased to the extent of 46 percent of the increase for industry as a whole. For clothing, food or luxuries, the increases as percentages of the increase for all industry were 55, 33, and 44 respectively. From the end of 1934 to July 1937 these percentages were 55, 54 for textiles and clothing, and only 34 each for foods and luxuries . . . A great portion of the usual leakages was avoided by means of laws and decrees . . . A large part of these [funds] was received back in the form of taxes, to be paid out again for public works and rearmament. Therefore secondary employment was sacrificed to a considerable extent in favor of a greater volume of primary direct and indirect employment (Poole, 1939, pp. 213-215, 218, 240, 242, 243).

The reimbursement of the principal sums was disposed of with consolidation (prolongation of the maturity date of the contracted loans from the absentee owners of Germany to the government), while the mass of payments consisting of wages, salaries

and profits were conveyed to the secondary circuit of credit and immediately re-injected – as invested funds – in a consecutive phase of production.

The economy at large was heavily taxed and consumption kept to a minimum by means of thoroughgoing controls. The sectors under the stewardship of the Nazi ministries (construction, heavy industries, civil engineering, etc.), were shown a detour out of the circuits of taxation with tax breaks and most important, with the practice of “price-financing” (*Preisfinanzierung*)[11]. The initial, moderate, interest charges on the evidences of debt held by German investors were paid by the “rest of the economy”, namely the working class, the farmers and the consumer goods industries. The amount of Reichsbank notes slowly increased throughout the upswing, and cash on hand at the credit institutes fell to rather exiguous levels (a recorded cash indebtedness ratio of nearly 1 percent in the mid-1930s), on account of the “repressed inflation” achieved by the regime.

Thus, loan money was sunk in the construction of “wasteful expenditures”[12], then trickled into controlled rivulets of immediate consumption (compatibly with the rather avaricious yields of German agriculture, and the shoddy imports of raw materials secured by Schacht’s commercial missions around the globe, especially in the Balkans and Latin America), and proceeded to accumulate in the form of debt *vis-à-vis* the swelling of a tremendous war machine.

In brief, the money hoarded during the great German depression, the so-called 1931 slump, had resurfaced – with the promise of war.

The retention of profits encouraged by the *Preisfinanzierung* for the purpose of self-financing may be conceived as a “perversion of the gift”. In the vision of Austrian mystic Rudolf Steiner, anything left over after all factors of production had been remunerated, that is any surplus, should step into the sphere of the gift. Such a sphere forms the pool of resources, which are drawn upon to nurture the spiritual and scientific investigation: the arts and sciences feed off the community’s surplus (Steiner, 1993, chapter 12).

In modern systems, inasmuch as they condense into more or less autocratic aggregates, no such passage is observable, although the phenomenon approximating this final transition is indeed that of taxation, whereby the community gives to the state, and the state returns the gift in the form of various services (education, security, etc.), or even destruction, as an exhibition of public greatness. In this final economic rite preceding the commencement of a new cycle, the tribes and their chieftains consummate this exchange under the eye of ancestral divinities and the spooks of clannish appetency:

Even pure destruction of wealth does not signify that complete detachment that one might believe to be found in it. Even these acts of greatness are not without egoism. The purely sumptuary form of consumption (which is almost always exaggerated and often purely destructive), in which considerable amounts of goods that have taken a long time to amass are suddenly given away or even destroyed ... In effect, and in reality, not only are useful things given away, but one even destroys for the pleasure of destroying ... But the reason for these gifts and frenetic acts of wealth consumption is in no way disinterested ... Between chiefs and their vassals, between vassals and their tenants, through such gifts a hierarchy is established. To give is to show one’s superiority, to be more, to be higher in rank, *magister*. To accept without giving in return, or without giving more back, is to become client and servant, to become small, to fall lower (*minister*) (Mauss, 1990, p. 54).

First, in the case of war expenditure, no direct consumption is taking place; second, the state is the sole acquirer of the goods; and third, the producer does not give, or return anything, other than wares, whose proximate purpose is to be destroyed. Of the 80 (90, Hitler claimed) billion Reichsmarks spent by the Nazis during the preparation for war, about half came from borrowed sources.

These were hoards that were eventually channeled into the bellicose enterprise of the Third Reich. One may be tempted to believe that they represented “the gift for war”. Yet not even rhetorical license would countenance such an oxymoron, for, indeed, there is no such thing as a “gift for war”, but only a loan for war.

Twice in 1938, the Reichbank under Schacht refused the Reich’s request to print money in order to redeem Mefo-bills coming due and the salaries of state employees. Twice the Finance Minister, Schwerin von Krosigk, called upon private banks for the extension of credit (Beck, 1955, pp. 130, 134). Tax yields were no longer sufficient to cover the outlay; Germany’s new War Loan had assumed unmanageable proportions. Time had come to march against Poland:

Wealth is paid for at the time that it is produced. The ability to pour out for five years a mounting tide of munitions is evidence of a nation’s wealth (Soddy, 1933, p. 158).

From 1933, those 80 billion RM, could have been readily given away, along several streams, some to the land for improvements, some to the arts and the sciences, and some to manufactures. In Nazi Germany, money circulated prominently in the industrial conduit; very little trickled in the pool of the gift, and the little that trickled therein was anything but free: cultural activities were restricted to propaganda and the ordinary channels of higher learning, while agriculture suffered a severe setback and the desertion of about one and a half million of able men to the military industry.

As reported in the preceding section, Malthus had written that workers, “if they possessed the will, have not the power [to consume]”. While “capitalists, though they have the power, have not the will to consume . . . to the necessary extent”. When the master producers fail to find purchasers for their products, prices decline, and the incentive to save diminishes. The stage is set for a depression, and conditions are predisposed for savings to go underground, where they shall wait out the crisis, until satisfying remuneration bids them to go “above”. The deficiency of effective demand can only be solved by a “union” between the will to consume and the “powers of production”.

The three Malthusian means to establish the “match” are: the division of landed property, the extension of domestic and foreign trade, and the maintenance of such a proportion of unproductive consumers as is best adapted to the powers of production.

The first expedient (the division of landed property) would have created, according to Malthus, “a greater number of demanders in the middle ranks of life who were able and willing to purchase the results of productive labour”. The Reich Entailed Farm Law (*Reichserbhofgesetz*) of 29 September 1933, conceived by Reich Peasant Leader (*Reichsbauerleiter* – Agriculture Minister) Walter Darré, “represented an attempt to guarantee the future of medium-sized peasant farmers who were expected to be the ‘blood spring’ of the German nation” (Noakes and Pridham, 1984, pp. 319-20). Lots whose surface ranged between 7.5 and 125 hectares were under particular conditions designated as entailed-farms. To prevent foreclosure and the feudal solidity of the yields of the soil, the entailed-farms had to be passed on undivided to the heir.

However, the Malthusian wish to create a “consuming gentry” out of the parcellization of landed estates miscarried on account of the exiguous number of farms to which the Act applied (a mere 22 percent, which scarcely affected the tenure of the Junkers), and of the aforementioned forsaking of the land to the advantage of industrial opportunity:

While industrial net production [between 1933 and 1938] increased by 90 percent, agricultural production rose by approximately 22 percent ... [These figures] prove that neither propaganda nor efforts to aid and promote agriculture could reverse the process of industrial expansion. Furthermore, whenever the trend toward “the return to the soil” clashed with objectives of rearmament and war preparations, the latter were given preference. Although the Nazis were aware of these failures, they neither accepted them as final nor refuted their original concepts because of them. As in other spheres, the perceived the matter as a temporary postponement in favor of more urgent tasks (Barkai, 1990, p. 140).

To the undisputed efficacy of the second remedy – namely, the recourse to an expansive policy of foreign trade – Schacht tributed no more than the mixed results of his “new plan”[13] – an active policy of two-way trade arrangements with, mostly second-rate, producers of agricultural staples (especially Brazil, Turkey, Rumania, Bulgaria, Yugoslavia), which, if gauged according to the protectionist animosity of the times, could have been deemed a half-success, but, if staked against the odds of a full-fledged recovery, came far short of the mark.

It was with the third Malthusian remedy of wasteful expenditures that the Nazis pulled their country out of the throes of depression. For the Hitlerites understood, as did Malthus, that national wealth in times of crisis is best stimulated “by the consumption of those who have been supported by taxes” (Malthus, 1986, pp. 409, 429).

As argued previously, a distribution favoring menial and unproductive work of all types is paid out of revenue, and therefore does not impinge on the cost structure and capitalization of business. The reasoning culminates, once more, with the apprehension that unproductive labor pertains to the sphere of the gift, even though the outlay is never turned into an actual gift, for all unproductive consumption, beyond the conspicuous display by the kept classes of wasteful goods and services, goes to swell the debt, on which interest is paid, and for which taxes are exacted. Thus, Malthus propounded the employment of workers in “those kinds of labour, the results of which do not come into the market, such as roads and public works”, and which do not compete with wares manufactured by productive labor. “What does not come into the market” is, by definition, gift; if it comes with a price (as interest upon a security), it is a perverted gift.

By 1940, Germany had 50.2 percent of her work-force engaged by war orders, no unemployment, and 48.8 percent of her income apportioned to war expenditure (Overy, 1994, p. 312).

From the viewpoint of business, the immediate advantages accruing from unrestricted waste are beyond dispute. It “keeps trade going”, and accounts for the windfall proceeds of “brisk times”. However, by the nature of its terms, the unabashed proclivity to lay production to waste, at a price, does not wholly dispense with the reckoning of compound interest. The perverted gift – that is, the money re-injected in the economy through wasteful ventures, at a price – generally assumes the shape of an interest-bearing security:

Wasteful expenditure on a scale adequate to offset the surplus productivity of modern industry is nearly out of question . . . Something has been done by the civilized governments in the way of effectual waste. Armaments, public edifices, courtly and diplomatic edifices, and the like, are almost altogether wasteful, so far as bears on the present question. They have the additional advantage that the public securities which represent this waste serve as attractive investment securities for private savings, at the same time that, taken in the aggregate, the savings so invested are purely fictitious savings and therefore do not act to lower profits or prices (Veblen, 1978, pp. 255-6).

The Malthusian physiognomy of Nazi economics

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Savings sunk in this type of outlay add a fourth species to great family of capitalist investment (i.e. productive and impairing[14] investment, and hoards) namely, the “wasteful (or fictitious) investment”: that is, the borrowing of money at interest to manufacture articles fated to be destroyed. Savings invested at a price are conditioned upon the hopeful expectation of an acceptable return. This predication goes some way toward explaining the hesitation exhibited by several constitutional democracies of the West in coping with the burdens of depression. In the 1930s, it appeared that only the promising outlook of the spoils of war could give some substance to the prospects of gain and to their accounting expression, the yield.

Summary and conclusions

As stated in the introductory, the analogy between the Nazi recovery and the Malthusian admonitions to yield precedence to the business exigencies of effective demand is here drawn with no malevolent desire to cast sinister shadows over the books of parson Malthus. The connection is established with a view to shepherd portions of the Nazi economic legacy back to its Liberal roots: again, the practical concerns of the captains of industry and finance of Germany, as well those of their *Führer*, had much in common, owing to the adoption of semi-identical social institutions and industrial arts (security of ownership, lending at interest, business principles, mass production, and technical innovation), with those of their counterparts in Europe and North America. As for the Malthusian palliatives required to revive a wrecked economy – creation of a small gentry, stimulus to foreign trade, and recourse to armies of unproductive consumers – the Nazis attempted systematically all three, and were finally successful with the third. Fortunately, we shall never know what would have become of Hitler’s imagined commonwealth in the plains of the Russia and Ukraine. However, it is somewhat disquieting to reflect upon the fact that the Nazis might have been able to achieve their plans of conquest by bending to their aims a capitalist set of rules, machines, implements, and institutions, which is, in form and shape, broadly speaking, not too far different from the industrial and conventional regime under which we live at this time. A common rejoinder to what may seem a hasty and untoward comparison, would point to the fact that the issue truly rests upon the spirit that animates that particular set of institutions and accepted business customs. Therefore, the riposte would be, it all boils down to a question of ethics: being those of the Nazis beyond any acceptable standard, the capitalist machine thus finds itself acquitted of the crimes of those who maliciously manipulated it. But having ethics, morals and a standard of values no true emplacement in our modern system of business and natural liberties, for nowhere is western business conduct, in law, practice, and enforcement, shaped after any traditional system of moral obligation bent on securing the well-being and freedom of every human being as part of a collective

whole; being ethics and morals relegated to the auxiliary, and much obsolete field of philosophy; being ethics and morals simply “dropped out” of the common system of law, which is informed instead by the business imperative, it thereby seems that our capitalist machine is, at best, amoral, and at worst, easily pliable to malevolent ends. And so, choosing the rosier option, that of amorality, it thus appears that the answer to the question, that is, whether the capitalist enterprise is in itself prone or liable to ever disrupt the peace of mankind, revolves indeed round the spirit of those in control of the machine. If it does, the customary argument prevails, i.e. capitalism is exculpated and guilt remains an affair of the human soul, something irrespective of the means employed. But this argumentation presupposes the net distinction between a nondescript realm of possible behaviors, which, if one were to refuse categorically to trace any idea back to metaphysical sources, can only be driven by chance (what makes one man a Nazi, another a dissident?), and a realm of fact, with no interface whatever between them. In other words, it posits that phenomena are disjoined from ideas. But how can fact not reflect the spirit? Worldly occurrences are manifestations of distinct thought processes. It is unlikely that an idea that is essentially good for mankind will take the shape of a custom or a tool that is capable of causing so much distress. It is not a fortuity that the capitalist machine has been mastered and driven best by minds, which, for as much as they differ in respect of folk fancy, have yet been equally possessed with the postulate of over-population – that is, with the adamant belief that there is not enough room on this earth for all of us.

Notes

1. “... *E crescendo i viventi geometricamente ... ed essendo tali terre e tali animali limitati, non possono dunque quei prodotti che se ne estraggono essere configurati in beni che in misura limitata ...*” (And whilst the living grow geometrically, and the soil and livestock being available in limited supply, produce can only be fashioned into goods to a limited extent) (Ortes, 1965, pp. 25, 33).
2. “That a continued increase in population is a powerful and necessary element of increasing demand, will be most readily allowed; but that the increase of population alone, or, more properly speaking, the pressure of the population hard against the limits of subsistence, does not furnish an effective stimulus to the continued increase in wealth, is not only evident in theory, but is confined by universal experience” (Malthus, 1985, p. 311).
3. “The consumption and demand occasioned by the workmen employed in productive labour can never alone furnish a motive to the accumulation and employment of capital; and with regard to the capitalists themselves. Together with the landlords and other rich persons, they have by the supposition, agreed to be parsimonious, and by depriving themselves of their usual conveniences and luxuries to save form their revenues and add to their capital. Under these circumstances, it is impossible that the increased quantity of commodities obtained by the increased number of productive laborers, should find purchasers, without such a fall in price as would probably sink their value below that of the outlay, or, at least, so reduce profits as very greatly diminish both the power and the will to save” (Malthus, 1986, p. 315).
4. That is, the American dominions of the Spanish Crown, especially Mexico, which were characterized by a population of few wealthy landlords surrounded by diffuse wretchedness.
5. “*Nello stato sociale, è necessario perché ei proceda colle generazioni al grado possibile, che ciascuno possiede alcuni beni non posseduti da altri ... Questo è lo stato naturale dell'uomo ...*” (In the form of social cohabitation, it is necessary in order to obtain a sustainable

progression of generations, that some individuals possess goods beyond the reach of others ... This is the natural condition of mankind ...) (Ortes, 1965, p. 42).

6. "The master producers and capitalists, though they may have the power, have not the will, to consume in the shape of revenue to the necessary extent. And with regard to their workmen, it must be allowed that, if they possessed the will, they have not the power. It is indeed most important to observe that no power of consumption on the part of the labouring classes can ever, according to the common motives which influence mankind, alone furnish an encouragement to the employment of capital ... It is most desirable that the labouring classes should be well paid ... But as a great increase of consumption among the working classes must greatly increase the cost of production, it must lower profits, and diminish and destroy the motive to accumulate" (Malthus, 1986, pp. 404, 405).
7. "Every society must have a body of persons engaged in personal services of various kinds ... They appear absolutely necessary ... Such a body of persons ... is not only necessary to the government, protection, health, and instruction of a country, but is also necessary to call forth those exertions which are required to give full play to its physical resources ... They are paid from revenue, not capital. They have no tendency to increase cost and lower profit" (Malthus, 1986, pp. 406-8).
8. "With regard to ... statesmen, soldiers, sailors and those who live upon the interest of a national debt, it cannot be denied that they contribute powerfully to distribution and demand; ... they ensure that effective consumption which is necessary to give the proper stimulus to production ... Yet to counterbalance these advantages ... it must be acknowledged that injudicious taxation might stop the increase of wealth at almost any period of its progress ... It would be the height of rashness to determine, under all circumstances, that the sudden diminution of a national debt and the removal of taxation must necessarily tend to increase the national wealth, and provide employment for the labouring classes" (Malthus, 1986, pp. 409, 411).
9. "Famine seems to be last, most dreadful resource of nature. The power of population is so superior to the power of the earth to produce subsistence for man, that premature death must in some shape or other visit the human race ... Should [the vices of mankind] fail in this war of extermination, sickly seasons, epidemics, pestilence and plague, advance in terrific array, and sweep off their thousands and tens of thousand. Should success still be incomplete, gigantic inevitable famine stalks in the rear, and with one mighty blow levels the population with the food of the world" (Malthus, 1985, pp. 118-19).
10. An explanation of the cycle of the "work-creation" bills can be found in several texts dealing with the Nazi recovery (for a summary description, see Preparata, 2002).
11. Namely the concession to private industrial concerns of additional funds effected through the remittance of high prices, which incorporated a mark-up far in excess of the mere cost of production.
12. "Wasteful expenditure" is here intended in the Veblenian sense; i.e. as that kind of outlay not conducive to a material enhancement of industry's productive potential.
13. Schacht's "new plan" "replaced the old system of percentage allocation of foreign exchange by a system under which a foreign exchange certificate had to be obtained for each individual transaction from one of the 27 Import Central Boards set up under the Plan before a definite order could be placed and the goods imported" (Arndt, 1944, p. 185).
14. This form of investment was identified, and its appellation coined, by Johannsen (1971, p. 35): it consists of the acquisition, for speculative purposes, of deeds and titles of ownership already in existence; it concentrates wealth in the hands of wealthy investors that can afford to buy these titles "cheap" when times are "tight".

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The “new” economy: complexity, coordination and a hybrid governance approach

The “new”
economy

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Abstract *The paper starts from the increasing spatial and functional fragmentation of value-added chains, global de-regulation and dis-embedding of “markets”, and interdependencies among the Net-based digital technologies. It develops a socio-economic setting with ubiquitous direct interdependencies and interactions, Net-externalities, “strategic” strong uncertainty, and omnipresent collective-good and social-dilemma problems. These entail co-ordination failures, either in the form of conventional market failure (i.e. collective blockages of action) or of “wrong” or outmoded institutional co-ordination and, thus, wide-spread technological “lock-ins” that are indicative of insufficient ability of collective action. This is particularly true for de-regulated, individualistic cultures. In contrast, sustainable innovation, used in a broad, i.e. technological and institutional, sense, requires an effective collective action competence. This, in turn, requires a new and increased co-ordination. Against this background, the global corporate economy has spontaneously developed private individualist substitute arrangements to cope with the new complexity, such as local clusters and hub-and-spoke networks, which all have severe shortcomings. With reference to what we call the “Linux” paradigm, the paper discusses the possibility of a spontaneous evolutionary, i.e. collectively learned, institutional co-ordination through emergent collective action and networks with “good” governance. The paper argues that only a hybrid system that consists of “well-governed” networks and a new approach towards more comprehensive and deliberate “interactive” and “institutional” public policy, supporting collective learning and emergent institutional co-ordination, is capable of solving the complexity and co-ordination problems of the “new” economy by increasing certainty, stability and more continuous and comprehensive innovation. This new policy approach is outlined at the end.*

The characteristics of the “new” economy are not evidenced so much by the hypermania of high-tech stock markets – which have turned out, with their subsequent deflations, to be rather conventional. They are evidenced rather by the more de-regulated, digitized and Net-based, and clustered, character of the real economy. This change entails a considerable intensification of direct interdependencies among economic agents, where the outcome for A directly depends on the behavior of B, and vice versa. Direct interdependencies have always been present in real economies and have been anticipated by socio-economists from all perspectives. However, the interdependencies



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have become so intense, obvious and ubiquitous that they can no longer be ignored neither by mainstream economists nor corporate agents and policy makers.

Situations of direct interdependence are genuinely complex, and complex situations, in turn, cause highly non-trivial co-ordination problems. Direct interdependencies involve direct interactions of agents. These can not effectively be conceptualized nor performed by the ideal “markets” of mainstream economics – with their arms’ length relations and short-run maximizing behavior of individual agents who are co-ordinated indirectly through (equilibrium) prices. Ideal prices are dependent only on the decisions of all other agents taken together and do not account for direct interdependencies among individual agents. Ideal “markets” and prices, therefore, are incapable of generating and diffusing information and the formation of future expectations required to effectively co-ordinate agents. As they fail in complex situations, they cannot generate the collective action capacity required – and, in this way, entail social costs in the forms of collective “blockages”. “Markets” have become even less effective since “neo-liberal” de-regulation has decreased their capacity to manage complexity.

This paper discusses co-ordination failures, i.e. lack of collective action capacity, involving either complete (latent) collective blockages of action (i.e. complete lack of coordination) or technological lock-ins on inferior paths of development (i.e. “wrong”, “old” or “outmoded”, “petrified” or “sclerotic” co-ordination) against the background of increased complexity in the “new” economy, and it discusses more effective forms of co-ordination and the opportunities for their creation.

Complete blockages of collective action can get “de-blocked”, or (technological) lock-ins be “un-locked” when a problem-solving, future-oriented collective action has, indeed, become feasible. We are speaking here of action capacity for innovation in a wide sense (i.e. technological and organizational).

The new features of the “new” economy force us to reconsider these issues and to re(ide)fine our conceptions. It is towards this end that the present paper is designed to contribute.

1. Increasing complexity

1.1 De-regulated globalization, social dis-embedding, and uncertainty

Why have information, expectations, complexity and co-ordination problems gained such prominence in the “new” economy?

First, “neo-liberal” globalization is a political and administrative project, regulated, on the one hand, by highly selective strategies of de-regulation, liberalization and empowerment of capital and corporate concerns and, on the other hand, by national regulation, bureaucratisation and authoritarian control of more general societal groups and concerns (see, for example, Kingston, 2000; Rupert, 2000; Elsner, 2000, p. 412ff.; Perraton, 2001, p. 678ff.; Elsner, 2003). The global layer of exclusive activities has become highly dis-embedded from the historically developed arrangements of social institutions that used to exist in the nation-states and in national and regional-local cultures. The “neo-liberal” construction of the global space has deliberately reduced collective action and social control. It has become a system of social fragmentation (in addition to spatial fragmentation) and escalates unequal power. As such, it is unable to act as an effective mechanism for civilizing the self-interest of the most powerful economic agents (see also, for example, Markusen, 1996a; Amin, 1999; Standing, 2001; Biswas, 2002). The “neo-liberal” global system, thus, can be called a system in

“institutional disequilibrium”, entailing an excess demand of international public goods, while demand is increasing and their supply decreases (Padoan, 2001).

Being “under-socialized”, the global economy does not provide enough “structure”. This is true even for the most powerful individual corporate agents. Hence, the corporate economy, being insufficiently co-ordinated, faces an increased level of uncertainty and turbulence (see, for example, Armstrong, 2001, pp. 533ff., 541ff.). As a result, instability and transaction costs (especially, information costs) have increased.

Consequently, powerful corporate organizations find it necessary to increase their power even more to keep control over their socio-economic environment and, thus, the global system has increasingly become a power-based, and thus redistributive, mechanism, generating ubiquitous negative external effects on third parties, the social commons and the natural environment, rather than a mechanism for comprehensive, sustainable and deliberate innovation and capacity enhancement. Increased uncertainty, instability and turbulence, indeed, are counter-productive for effective problem solving.

Note that we are talking here of strong uncertainty which we understand as being “strategic” in the sense that, with ever more fragmentation, the individual agent cannot know at the outset, nor calculate with a certain probability, the “strategic” choices of other agents (see, for example, Dequech, 2001, p. 919f.).

1.2 Fragmentation of the value-added chains and technological complementarities

Second, globalization has increased momentum towards vertical disintegration of value-added chains and the redefinition of the boundaries of corporate organization in an effort to reduce labor costs and to control an enhanced labor force world-wide. Value-added chains not only have been spatially fragmented by selecting labor and suppliers at optimal locations on a global level, they have also become functionally fragmented.

Functional fragmentation requires securing technological compatibility and complementarity in the chain in an effort to co-ordinate for quasi-reintegration and effective production on a now decentralized basis (see, for example, Langlois, 2003). International restructuring, thus, is as much a struggle over the problem of uncertainty and transaction costs through new forms of co-ordination as it has been the provision of cheaper labor, resources and new sales opportunities (see, for example, Ruigrok and van Tulder, 1995; Raikes *et al.*, 2000).

Again, it has involved individualistic, power-led solutions on an hierarchical basis such as the transnational corporation and its centralized hub-and-spoke supplier networks (see, for example, Jones, 2000).

Specifically, manufacturing and services have become divided from each other into autonomous units and, thus, also directly interdependent in that collective learning processes are required that ensure a high level of co-ordination. Here, again, effective action is not feasible unless governed by a co-ordination mechanism that can deal with increased complexity (see, for example, Rabach and Kim, 1994; Bennett *et al.*, 2000; Ruys, 2000).

1.3 Digital information, Net-technologies, Net-externalities and market failure

Third, the “new” economy is characterized by digital, microelectronic and Net-based technologies. No decision can be made that does not have a technical dimension, and no

technically influenced decision can be made that does not require the technical complementarity and compatibility with the decisions of others. In this way, no decision can be made and no information or innovation can be generated that does not involve positive or negative externalities. Every decision has to be considered relevant for the ability of agents to communicate and effectively interact with other agents.

This is but one aspect of the fact that most information increasingly displays the features of a collective good. Information has always been characterized by non-rivalry in consumption. Regardless of the fact that generating and exploiting asymmetric information is a dominant and “rational” opportunistic strategy in an individualist environment, joint use (joint consumption) of information is welfare-enhancing and increasingly becomes a basic necessity for social co-ordination. It is well known in economic theory that the total societal benefit of information, as with collective goods in general, increases with the number of its users. Basic information, thus, is systemic – and it is normally generated collectively from billions of acts of behavior and learning. Against this background, technology, innovation and production have become systemic as well.

Digital microelectronic technologies have added another characteristic to the collective-good property of information. The opportunities to produce, process, store, reproduce and disseminate information have drastically increased so that the (re-) production of information takes place at near-to-zero marginal costs. The “new” economy, thus, has entered a stage of informational abundance which bears little resemblance to the conventional mainstream economic assumption of scarcity.

Further, the technical facilities for reproducing information have become so widespread that they are no longer under control of the original producer. Digital microelectronic information has virtually become subject to non-exclusion, rendering information a full-fledged collective good (see, for example, Gallaway and Kinnear, 2002).

The technological basis of the economy has become net-based. Since net-based technologies are the more useful the more agents are in a specific net, each agent with his technological decisions generates positive or negative external effects on third parties. Net-externalities have come to govern the dynamics of the “new” economy – and the “efficient” neoclassical individual maximization is becoming a near-to-irrelevant exemption (if it ever was a relevant reflection of real socio-economies) (see, for example, Hutter, 2001).

Finally, information and technological knowledge are increasingly user- and context-specific and tacit, and must be developed and learned in a dense common interaction process.

With accelerating innovation and competing (and, initially, non-standardized) technologies, uncertain, reluctant and passive, or even completely blocked agents have become an ubiquitous latent feature of the economy (see, for example, Tirole, 1995, chapter 10.6; Wettengl, 1999). The introduction of color television, video-systems, high-definition TV and computer operating systems are instances of the recent industrial history that demonstrate the ubiquity of latent collective blockages and, thus, impeded the dissemination of new technologies. Thus, there are pervasive tendencies in the “markets” to generate innovation at “sub-optimal” levels (see, for example, Miller, 2001).

The presence of competing suppliers with different technologies implies that problems of technical standards, interfaces and protocols have become ubiquitous.

International private-public bureaucracies have been established to assist the development of technological standard-setting, interface definitions and transfer protocols in order to prevent potential blockages from becoming effective (see, for example, Weitzel and van Westarp, 2002).

All in all, there is no doubt that it has become more difficult under these circumstances to collect profit in the conventionally commercial way. The technically warranted potential abundance of information as a collective good reduces the commercial producers’ abilities to collect revenue in the “markets”. The efforts to change conditions in order to secure and increase profits, in turn, endanger a continued process of generation of new information, knowledge, and cultural material. Here we may have to face “the simple choice between profits and production” (Gallaway and Kinnear, 2002, p. 443).

As increased complexity basically reflects the overall socialization of production and innovation, in the face of a fragmented and de-regulated economy, “the need, then, is for new institutions . . .” (Gallaway and Kinnear, 2002, p. 446). And, “[t]he limitations of information as a commodity now have come to the fore, both in economic analysis and in policy matters” and call for a “thoroughgoing innovation in organizational design” to include “a very high level of collaboration” (Lamberton, 2001, pp. 115, 117f.; see also, for example, Orlikowski and Iacono, 2000).

This renders economics a science of (the collective learning of) adequate co-ordination mechanisms rather than a science of individual maximization, general equilibrium and “optimality” (see, for example, Friedman, 1994; Tirole, 1995).

1.4 Technological lock-ins, collective goods and social dilemmas

Against this background, there are different kinds of co-ordination failure “in the market”. Collective goods may cause complete blockages of action, i.e. ideal “market failure” involving no co-ordination. Co-ordination failure, however, may also assume the form of “wrong” or outmoded institutionalized co-ordination, namely technological lock-ins on technologically inferior paths, a case connected with “old”, “petrified”, etc. networks and conventional forms of restrictive collusion. Co-ordination failure will occur, specifically, in individualistic “market” cultures where the capacity of collective action to generate continuous problem-solving and innovation in the broadest sense, and, thus, to evade the blockage or the lock-in, is lacking. In the absence of effective co-ordination through a more comprehensive and deliberate collective action, any established technology and economic path may unintentionally be inferior (for the famous QWERTY case and locked-in technological paths, see, for example, Arthur *et al.*, 1985; David, 1985).

All in all, this boils down to the fact that all production and innovation have become “complementary”, “systemic” and societal, and in most cases display the features of, or are connected with, collective goods or social dilemmas (see section 3 below). Here, individual agents have to co-operate in order to generate a more effective collective outcome, but at the same time have individualistic incentives not to do so, and even to gain an extra one-shot profit by exploiting others, if these contribute to the collective outcome.

It is a complex situation where co-ordination is highly non-trivial.

2. Spontaneous individualistic substitutes to cope with complexity

2.1 Power exertion, collusion and “intellectual-property-rights”-fences

The global corporate economy, in order to establish solutions to compensate for the co-ordination failures and strong uncertainty, namely in dis-embedded “markets” and individualist cultures, primarily deploys conventional and restrictive forms such as the use of market power and monopolistic positions, hierarchy, collusion, political lobbying for “intellectual property rights” and for international private-public standard-setting in the interest of the most powerful champions (see, for example, Block, 2000, p. 55ff.; see also section 2.3).

The features of the “new” economy provide, through falling marginal costs of information and increasing returns of scale and scope, a textbook case of “natural” monopoly. This case may be called the Microsoft paradigm, where an individual powerful hierarchy commands considerable proportions of a relevant core technology and demand. It typically organizes large hub-and-spoke structures throughout the global economy (see, for example, Weitzel and van Westarp, 2002). Note that hub-and-spoke structures result from power differences and hierarchy interfering with basic direct interdependence.

As has been widely analyzed, the new digital and net technologies have pushed “power-ization” and centralization throughout the “new markets” (for telecommunication see, for example, Miller, 2001; for the mass media industries see, for example, Champlin and Knoedler, 2002).

Notably, this agrees with the artificial “construction of scarcity” of information which could easily be provided as a public good and largely be available for free (see, for example, Gallaway and Kinnear, 2002; May, 2002, p. 125ff.). The enforced power structure, thus, “is increasingly at odds with technological reality” (Gallaway and Kinnear, 2002, p. 446).

2.2 Local clustering and networking

The corporate economy, however, also develops new forms of co-ordination such as local clustering. Local clustering, with its recurrent and long-termed interactions with near-by located suppliers, service providers, customers, competitors and different societal and public agents, has become a new kind of spatial organisation for the most advanced, high-tech, globalised and fragmented parts of the corporate economy (see, for example, Feser, 1998; Maillat and Grosjean, 1999; Breschi and Malerba, 2001). In spite of its rhetoric of globalisation, the corporate economy, in this way, is striving for spatial and cultural proximity through some form of local re-embedding, structure, certainty and collectivity (see also, for example, Gertler *et al.*, 2000; Torre and Gilly, 2000).

Clusters are “functional” systems of supplier relations that stem from, and largely adhere to, “markets” in the sense that they emerge from spontaneous, volatile arms’ length spot-relations (see Elsner, 2000, p. 413ff.). At the same time they partially outgrow the “market” in that they establish more stable and frequent or “dense” interactions. They partly drop “market” relations as relations get increasingly resistant against competitive low-price offers from outside the cluster. This is because their recurrent and stable interactions lead them to develop parallel and similar ways of thinking, planning, expecting and behaving, better knowledge of each other – and in this way more stable expectations about the others’ future actions, i.e. some form of “trust”. Those expectations and mutual trust outweigh low-price offers from “outside”.

Without necessarily being conscious about it, the agents enter into processes of collective learning of correlated behavior that co-ordinates them in a non-“market” way and helps them solve some collective dilemma problems (see also, for example, Lazonick, 1993; Steiner, 1998; Dupuy and Torre, 1998; Elsner, 2000).

However, power and hierarchy will normally enter and “conquer” clusters. Global corporate agents organize fragmented value chains (on global and local levels) on the basis of power, hierarchy and centralization (Ruigrok and van Tulder, 1995). They control information flows, entry and access to resources and play their roles as key agents, following the postulates of large-scale production under the conditions of global fragmentation of resources, production chains and customers (see also, for example, Lazonick, 1993; Swyngedouw, 1997; Raikes *et al.*, 2000, p. 392ff.). Against this backdrop, clusters adopt structures of hub-and-spoke, “satellite platforms” and other hierarchical and power-based forms (see, for example, Markusen, 1996b).

Consequently, the effectiveness and innovativeness of clusters must not be overestimated. Clusters may be highly innovative as long and as far as the powerful hub forces innovations in his own interest. However, the more power-based, hierarchical and hub-centered a cluster becomes the more risky and precarious the cluster will become, i.e. prone to early downward swings and accelerates premature aging (see, for example, Tichy, 1998).

Clusters are the basis for more consciously developed kinds of co-ordination, i.e. (“strategic”) networks, normally established by some subset of firms in the cluster, and on the basis of the trust that unintentionally has emerged in the cluster. Networks are consciously contracted, “strategic”, project-based, multilateral and mid-term oriented co-operative co-ordination mechanisms (for a definition, see Elsner, 2000, p. 413ff.). As such, they will even more effectively assist in the solution of the collective problems and in the promotion of collective learning and institutions-building. (Note, however, that we are talking of “progressive” networks here, i.e. networks whose structures and governance rules are meant to solve the problems defined above, i.e. to promote a sustainable high degree of innovation in a wide sense (technical and organizational), not to generate and protect any “invidious” power bloc that has been a most common form of “networking” in industrial-capitalist history. To make an operational distinction between “progressive” and “regressive” networks one may also refer to a set of properties that define the position of the corporate agents affected in the life cycle of their products, technologies, industries and regions. In sum, we may define problem-solving networks with reference to their structures, governance, performance and relative life cycle position of their members.)

Nevertheless, also “progressive” networks are insufficient substitutes. Being private solutions, unregulated networks, similar to clusters, in the reality of power-based economies display tendencies towards exclusion and collusion, and, thus, hampering comprehensive and sustainable innovation through a hub-and-spoke structure (see, for example, Baker, 1996; Pratt, 1997; Armstrong, 1998).

2.3 Networking, open-source-type – “good” network-governance for self-sustained co-ordinated action?

However, other network types have inspired recent contentions about the possibility of self-organized and self-sustained institutionalized co-operation and more comprehensive and deliberate collective action.

A promising network type is what we call the Linux paradigm. At its core is a radical open source strategy *vis-à-vis* the whole Internet public. That is, its structure is largely characterized by decentralization, little power differentials and little power exertion by hubs that rather assume the role of technical organizers and moderators (see, for example, Cohendet *et al.*, 2001; McKelvey, 2001; Raymond, 2001). Indeed, the largely public and highly communicative, even near-to-ideally anarchistic, process is one of the biggest success stories of the digital economy. Its unprecedented and sustainably high speed and high quality of innovation obviously exceeds that of the system built by the powerful hierarchical structure of Microsoft, i.e. the MS-DOS/Windows operating system.

Indeed, a core finding of “hackerdom” is that structures of low levels of power and hierarchy and corresponding governance rules aiming at open information flows and non-exclusion are network properties favorable to a culture of effective learning of co-ordination and, subsequently, to fast and sustainable innovation in the broadest sense (see, for example, Foray, 1998). If network structure plus governance makes up for high performance, then we may conclude that the principles developed and applied here may be highly relevant as a model of networking.

A large amount of literature has developed “good governance” principles favorable to effective collective action so that networks can avoid a restrictive/collusive character that could make them vulnerable to sharp external changes, premature aging or retarding rather than innovative behavior. Among these principles are openness, guaranteed and continuous entry, parallel and redundant actions among network participants, the exertion of the “voice” mechanism irrespective of differences of size and power of participants, “reciprocity”, and others. These ensure continuous learning and institutionalization of collective action and, subsequently, an abundance, high level and continuity of systemic innovations (see, for example, Ostrom, 1990; Powell and Smith-Doerr, 1994; Maggioni, 1997, pp. 238-49; Bogason, 2000, pp. 49ff., 64ff.; Elsnér, 2000, p. 450ff.; Lazonick, 2001). Sustainably effective networks of this kind could well be ineffective in the short-run, especially, for powerful individual agents.

However, in the reality of power-centered de-regulated “market” economies even those “well-governed” networks may become dominated by powerful corporate agents. Private ownership of the open software is still well-defined and the interaction, with the incentive of superior effectiveness of everyone involved, is well-organized by the hubs/owners (see Cohendet *et al.*, 2001; McKelvey, 2001, 222ff.; Raymond, 2001, p. 73ff.). Their structures and rules may easily become vulnerable *vis-à-vis* the exertion of power and hierarchy. Against the background of the increasing dominance of conventional powerful industrial players and state-administrative control in favor of commercial B2B and B2C interests in the Internet, the future of largely self-regulated networks in the Internet economy has become highly questionable (see, for example, Dolata, 2002). Even formerly well-governed and highly innovative networks may petrify and become locked-in forms of co-ordination – namely under the pressure of powerful private-public collusive structures. The recent attack of the Intel-Microsoft “Trusted Computing Platform Alliance” (TCPA) on open source and competitive operating systems (namely Linux) obviously is the most comprehensive challenge of informational liberties and self-organized and self-sustaining processes through a cartel of the most powerful commercial agents in the whole microelectronic era, and it

is heavily supported by the state through the Digital Millenium Copyright Act and new certification and control acts to come (see, for example, Anderson, 2003).

Therefore, we must take a closer look at the possibility of solving the complexity problem through self-sustained private co-ordination.

3. Complexity and co-ordination beyond the “market” – the strength and weakness of “self-sustained” evolutionary institutions-building

3.1 Complexity and the problem of co-ordination

Complexity is often defined as a property of a system that contains a large number (N) of agents with direct and mutual relations $[R(N)]$ amongst them.

Ideal “markets” can not cope with complexity in this sense as they are systems of isolated individual agents with man-good relations only, determined through a (equilibrium) price vector that, in turn, is governed by an auctioneer. Agents are indirectly interdependent in that the (equilibrium) price vector depends on the aggregate quantities of supply and demand of all other agents taken together.

Acknowledging real-world direct interdependencies and interactions implies complexity becomes a core property of both the object and theory of economics (see, for example, Maggioni, 1997; Rycroft and Kash, 1999; Delorme, 2001; Dequech, 2001, 912ff.). This is related to the fact that $R(N)$ becomes a square function: $R(N)_{\max} = N((N - 1)/2)$, so that, with moderate numbers of N , real-world (i.e. “bounded rational”) individual agents, who have the maximum number of R in their social lattices of direct interdependencies, will perceive complexity as “near-chaos”.

Real worlds of collective-goods and social dilemmas are even more complex with their multiple relations R_i among each two agents. This can be illustrated with a simple prisoners’ dilemma (PD) structure:

	C	NC
C	a, a	d, b
NC	b, d	c, c

where:

$$R_i = [R_1(C, C), R_2(NC, NC), R_3(NC, C), R_4(C, NC)].$$

As every single decision even in any kind of “market” has to contribute to some collective framework good, i.e. the (re-)production of the environment of social-rules (see, for example, Callon, 1998), the PD structure reflects the fact that the economy is a socio-economy and that production, exchange and innovation have a collective, societal character.

In view of complexity, effective action becomes feasible only by way of effective complexity reduction. The conventional device to reduce complexity in “market” economies, again, is to resort to power, hierarchy and hub-and-spoke structures. $R(N)$ can be reduced to $(N - 1)$ in ideal hierarchies and hub-and-spoke structures, but entail the shortcomings previously discussed.

With social dilemma problems, however, reduction of complexity requires decreasing the number of potential multiple relations down to at least one effective co-ordinated way of behavior. The complexity-reduction device here is collectively

learned institutions of co-operation. This may lead, under favorable conditions, and in an evolutionary process, to a reduction of the multiplicity of relations: $R_i \rightarrow R_1 = R(C, C)$.

This solution must be “systemic” in the sense of establishing a super-individual context that prevents individuals from acting in their short-run self-interest. This, in turn, requires the promotion of recurrent interaction and developing mutually consistent expectations (about others’ actions and expectations), i.e. with futurity (see, for example, Delorme, 2001, p. 102ff.). The behavior which results habitually excludes or restricts the strive for short-run maximization, i.e. a social institution of co-operation emerges in spite of continuing incentives to defect. The reconciliation among these “mixed-typed” (partly competitive, partly consistent) individual interests is only conceivable as a commonly accepted habitual rule, i.e. an institution (see, for example, Dequech, 2001, p. 922ff.). Institutions, thus, are informational and “expectational” devices that inform the individual about what kind of behavior he/she can expect from others and what is expected from him/her.

Complexity, then, may be reduced to a level where individuals can reasonably be expected to act effectively, i.e. to manage the now reduced level of uncertainty. In this way they become capable and inclined to innovate, i.e. to develop more comprehensive and continuous problem solving through future-bound behavior. Capacity of action will then be gained collectively (as it can only be gained collectively!) In the face of a level of turbulence that is too high, the individual, indeed, is incapable of being innovative in a comprehensive, deliberate and sustainable way (see also, for example, Setterfield, 1996; Schreyer, 2000, p. 287ff.).

Also, real-world “markets” are effective in this sense only if well-embedded in institutional arrangements that co-ordinate adequately to manage the problems of collective goods and social dilemmas (see, for example, Callon, 1998; MacEwan, 2000, chapter 4 on “The social construction of markets”).

Game theory, as has been indicated, may provide some deeper insight to this solution.

3.2 The possibility, and improbability, of spontaneous co-ordination through evolutionary institutional emergence

Co-ordination failure here is represented in a social setting characterized by:

- Direct interdependence of the individual agents, i.e. a genuinely social situation.
- A social dilemma structure of the PD type, i.e. a largely individualistic culture at the outset; “neo-liberal” “market” conceptions have made cultures more individualistic in the past decades; thus, the individualistic behavior represented in a PD, and assumed at the outset, can be taken as a “worst case” view of a reality in which the social institutions of co-operation are weakened (note that in technical terms our argument can also be developed on the basis of other social problem structures, such as a co-ordination game).
- Recurrent interactions, i.e. infinitely or indefinitely-repeated interactions.
- “Sequentiality” of rounds of decision making, i.e. the opportunity for processes of collective learning and institutionalization.

The PD reflects why “markets” fail in worlds of direct interdependence with collective goods present – namely, in a relatively individualistic, dis-embedded culture. As is

well known, co-ordination failure is demonstrated in a one-round PD or a PD with a finite and known number of rounds. The collective good is inaccessible, then, to the individualistic private agents. However, if we define a private good as a good that can self-sustainingly be produced by the interacting private agents, then the transition from a one- or finite-round PD to a supergame (being repeated infinitely or in an indefinite number of rounds) may imply the potential transition to a “private” good.

A simple representation of a static solution of a two-persons/two-strategies PD-supergame with given pure strategies (co-operation and defection) is the following (see above, where $b > a > c > d$, and $(b + d)/2 < a$ in order to exclude alternating combinations of co-operation and defection):

Co-operative agents will normally gain:

$$\begin{aligned} C &= a + \delta a + \delta^2 a + \dots \\ &= \frac{a}{1 - \delta} \end{aligned} \quad (1)$$

where δ is a common discount parameter. A defecting agent may gain, as a maximum (i.e. while the other one co-operates in the first round and also defects from the second round on):

$$\begin{aligned} NC &= b + \delta c + \delta^2 c + \dots \\ &= \frac{c}{1 - \delta} + b - c \end{aligned} \quad (2)$$

Co-operation pays if $C > NC$. This can be postulated as $(1) - (2) > 0$, or:

$$\delta > (b - a)/(b - c). \quad (3)$$

This shows that the superiority of co-operation depends on the relative pay-offs of (a), (b) and (c), i.e. the incentive structure, and the discount parameter, i.e. futurity. Co-operation will be feasible only when the future plays a sufficiently large role in relation to the incentive structure. A basic connection exists, then, between the collective action capacity, or co-ordination success, and the long-run perspective, i.e. sustainability of action. We will return to this result later to discuss some of the policy implications.

Note, however, that this result is based on a static, so-called single-shot, supergame with fixed, idealized strategies in which only a single calculation and decision is to be made by the agents. Because we have, in contrast, assumed a process of sequential rounds, we additionally would have to show how co-operation emerges in a process. This means showing how individuals change their behavior through (collective) learning (i.e. individual learning in direct interactions). Here, however, we will only roughly refer to the literature.

As a first step we may refer to the well-known Axelrod solution (see Axelrod, 1984, 1997). Axelrod employed a simple replicator mechanism for the interactions of two strategies for PD-supergames that were performed in great numbers. The well-known result demonstrated the stable superiority of the relatively simple co-operation strategy, “tit for tat”. This result has been interpreted as illustrating the emergence of the institution of co-operation in an evolutionary process. This may be justified if a replicator is interpreted to be a learning process. It assumes the differential selection of

the individuals, and a new individual who assumes the place of an old one, who has ceased to exist, can be interpreted as an individual who has changed his behavior through learning. The conception of cultural evolution, however, requires a more explicit conception of the search and learning mechanism (see, for example, Stein, 1997). The object of differential selection and differential reproduction here is focused on the type of behavior (i.e. the institution), not the physical agent.

There are many approaches and models to formalize cultural-evolutionary processes that employ mechanisms of “selection”, “crossing”, “mutation” and individual adaptation through learning (from one’s own experience, through imitation, etc.). They formally show that cultural evolution in dilemma-prone (PD)-settings may result in the emergence of institutions of co-operation (see, for example, Schotter, 1981; Liebrand and Messick, 1996; Franke, 1998; Fudenberg and Levine, 1998; Kirman, 1998). These results might support “neo-liberal” policy advisors’ great expectations for the evolutionary “efficiency” of the “market” economy.

However, a problem that remains, and cannot be solved through individualistic rationality, is the continuing existence of the basic social dilemma. The dilemma-prone structure will always remain in the background as a behavioral option, how ever latent or virulent. This is reflected by the fact that the spontaneous evolutionary process may be highly time-consuming and fragile, if not blocked completely. The more individualistic the culture is, i.e. the stronger the dilemma-structure in terms of the relations of (a) , (b) , (c) and δ , the greater the incentive will be to defect, and, especially, to deviate from an pre-established institution. Laboratory experiments and model simulations have illustrated that hundreds or thousands of interactions may be necessary to establish co-operation as a rule of behavior and that, even then, co-operation may be unstable and occasionally collapse because of small external changes or internal dynamics (see, for example, Lindgren, 1997).

In addition, an individualistic culture and “market”-dominated forms of co-ordination may also increase the probabilities of an insufficiently developed collective action and, thus, of the continuation of a “wrong”, “outmoded” or “petrified” institutionalized co-ordination (i.e. locked-in co-ordination) where collective action capacity is not sufficiently developed to un-lock the situation and to leave the inferior path.

Furthermore, there is no guarantee that the collective goods with which even the best-governed networks deal with and generate are confined to the limits of the networks. On the contrary, collective goods normally are functionally, personally and/or spatially more far-reaching than the boundaries of any private-agents networks.

It seems necessary, therefore, to introduce a more comprehensive and deliberate supra-individualistic rationality into spontaneous, decentralized, evolutionary processes. Specifically, a public-policy frame-setting is needed in order either to initiate (i.e. de-block, un-lock) or to accelerate and stabilize processes of institutionalization which cannot be brought forth with sufficient certainty, speed and stability by individualistic rationality alone. Generally speaking, the societal character of production and innovation requires an integration even of “well-governed” networks in a larger, namely public environment (see also, for example, Maggioni, 1997; Bogason, 2000, p. 76f.; Elsner, 2000, p. 435ff.).

4. A hybrid co-ordination arrangement and “institutional policy”

4.1 *Towards a leaner policy*

In an era of “neo-liberal” policy prescriptions, the collective-good problem is dealt with by removing transaction costs and empowering the “markets” and enlarging their ranges through “de-regulation” and “privatization”. This, however, renders the latent co-ordination-failure problem ubiquitous.

In conventional economics, the “collective-good” problem is regarded as a purely public task. However, neoclassical “public choice” theory, which is meant to cover those areas that the “market” leaves aside, basically faces the same individualistic problems of co-ordination that are faced by the market’s individualistic dilemmas. This view has unduly shifted responsibility away from the private agents, who – in pursuing their own individual economic interests – face considerable incentives in contributing to solving the problem, as the simple PD structure makes clear.

As the private agents have a positive interest in the production of the collective good regardless of the fact that it cannot be adequately produced by them, because of the co-ordination failure inherent in their spontaneous “market” interactions. Thus, the public agent can request the private agents to contribute to this social solution. This allows for a leaner policy approach.

A related insight from the PD-structure is that the “collective good” problem, or the dilemma structure, can be seen as a gradual problem. If the public agent would subsidize co-operative behavior to such a degree that $a > b$ and $d > c$ in the above mentioned PD, so that co-operation is clearly more attractive than non-co-operation, then the dilemma is dissolved. However, this might well involve a costly public policy. Social problem solving, in contrast, can be promoted by gradually weakening the dilemma structure and, in this way, permitting a more collective and co-ordinated culture. In a numerical example, say $\delta = 0.9$, $b = 4$, $c = 2$ and $d = 1$, equation (3) indicates that co-operation would already be superior to defection with $a = 2.2$; note that (a) would have to be > 2.5 in the example in order to meet the additional condition $(b + d)/2 < a$. This illustrates that small rewards for co-operation (far less than the condition $a > b$) can already be effective. Generally, with gradual relative changes in the incentive structure, the probability of co-operative solutions may increase, i.e. co-operation may come into existence with increased probability, speed and stability.

A leaner policy becomes feasible because the approach allows for a clearer definition of the relative interests, or benefits, as well as a clearer allocation of the relative responsibilities, or costs, of the private and public agents – as opposed to fuzzy “public-private partnerships” that have come into fashion recently.

4.2 *Meritorization*

We assume that the potential outcome of the private interaction process can be related to a policy objective in such a way that it can be subject to social valuation or “meritorization”. The private agents are assumed to be capable of collective production of a “good” that has a potential public value in addition to its private values.

The conception of the merit good has been revived since the eighties, although its basis has been considerably developed (see, for example, Brennan and Lomasky, 1982; Musgrave, 1987; Ver Eecke, 1998) into one that substantiates public meritorization on the basis of “community preferences” that have evolved from historical processes of interaction outside the “market” (see Musgrave, 1987, p. 452). This implies a social

evaluation of the outcome of the “market” through some kind of social decision making that is broader than, independent of, and superior to the “market”.

For our purpose we will define a merit good as a good that was a collective good at the outset but is now produced by the spontaneous interaction process described (i.e. a “private good” as defined). The good is evaluated through a social decision-making process with respect to its quantity, quality, relative price, and – as new dimensions discovered in deficient individualistic interaction processes – the time span needed for its production as well as the certainty or stability of providing it through private interaction.

Specifically, the conception of the negotiated economy has been elaborated to show that the “market” has to be deliberately embedded in a wider socio-political process and that this is workable (see, for example, Commons, 1990, pp. 612ff., 649ff.; Ramstad, 1991; Nielsen, 1992; Shipman, 1999, p. 214ff.). We will not delve into this discussion any deeper here (for a more detailed argument, see Elsner, 2001) but will simply assume an economic policy agent who is legitimized through a process of participatory democratic decision making. In this process, then, public policy objectives can be developed which provide the criteria for the “meritorization” required.

4.3 Instruments of an interactive and “institutional” policy approach

The first complex of instruments aims to change the incentives in order to increase the relative rewards for co-operation or the opportunity costs of defection (or decrease the opportunity costs of co-operation and the net benefits from non-co-operation). Here, it is important to note that the incentives for co-operation, in real worlds, may largely consist of non-pecuniary benefits (for this, see also, for example, Klein, 1990; de Bruijn and ten Heuvelhof, 1995, p. 173ff.; Elsner, 2001, pp. 76-9).

Equation (3) shows that the more successful the public agent is in involving the private agents into a future-bound process, i.e. the higher the discount parameter δ is the less the increase of the incentives needs to be. The second complex of instruments, thus, refers to the “futuraity”, i.e. the probability for private agents to meet again. The discount parameter can be interpreted not only as the weight allocated to a future pay-off but also as the probability of a future interaction among the agents. Co-operation can be promoted if future interactions become more probable.

This condition can, indeed, be made subject to policy control. As Axelrod (1984) has already pointed out, the public agent can increase the importance (i.e. the probability) of future interaction, for instance, by making co-operation more permanent through more frequent meetings, dividing projects into several sub-interactions, connecting different projects so that the same agents will meet in different arenas and become more aware of their common future.

Generally, there is opportunity for the public agent to deliberately shape the conditions of interaction to promote collective learning and institutionalization of co-operation. This policy approach helps to change the behavior and expectations of the private agents by changing the pay-off structure and time horizon of their interactions. Thus, it interacts in a specific way with the interaction process of the private agents (for the basics of the “interactive” or “institutional” approach to economic policy, see, for example, Tool, 1979; Hayden, 1994; Elsner and Huffschnid, 1994). This has largely been elaborated into operational policy conceptions (see, for

5. Conclusion: a hybrid co-ordination arrangement for more effective co-ordination

Most of the features of the “new” economy have considerably increased complexity, with direct interdependencies, collective-good problems and social dilemmas. It is a world of de-regulated globalization, dis-embedding, fragmentation of value-added chains and locations, net-technologies and complex interaction between manufacturing and services. Also, problems of strong uncertainty have come to the fore. Innovations have become “systemic”, a fact that largely reflects the increasing collective and societal character of production. The problem of effective, comprehensive and sustainably innovative co-ordination has become a dominant issue of the modern economy, and of economics as well.

The “market”, with its dominant price-based information and co-ordination, is insufficient to solve these problems. This is increasingly the case as the “markets” are de-regulated under “neo-liberal” postulates and, hence, dis-embedded from their historically developed institutional structures. These institutional structures had often reduced uncertainty and stabilized expectations and in this way, often assisted collective learning and co-operation, reduced complexity and cared for a high level of co-ordination. With their reduced effectiveness, the “market” loses its ability to innovate broadly and sustainably, and mechanisms of power accumulation and exertion, and wealth redistribution (rather than welfare enhancement) come to the fore.

The global corporate economy has developed different spontaneous private/individualist substitute co-ordination forms in order to reduce complexity to manageable levels. Among these are local clustering, networking, and public-private collusion for standard setting, besides the conventional collusive and power-based strategies. These, however, are incapable, by and large, of adequately dealing with complexity. Clusters and networks, especially, turn out to be largely hub-and-spoke-typed and highly dependent on the short-run interests of powerful hubs. Inadequately structured and governed networks, in turn, tend to age prematurely and lose innovative capacity. Effective co-ordination, thus, is either completely blocked or processes become locked-in through “wrong”, “outmoded” or “petrified” institutionalized co-ordination where progressive change is not feasible through co-ordination and collective action competence.

Evolutionary game-theoretic arguments provide insights into the process of direct interaction and can demonstrate that self-sustaining processes may, indeed, lead to the emergence of institutions of co-operation and co-ordination through collective learning. However, in a largely individualist culture, these processes also tend to be highly time-consuming and fragile, if not blocked completely. Specifically, in an individualistic culture and “market” dominance, with an insufficiently developed (i.e. insufficiently comprehensive, deliberate and sustainable) collective action, spontaneous, decentralized evolutionary processes can entail lock-ins on inferior paths.

A “hybrid” system of effective co-ordination, a “new new deal” (de la Mothe and Paquet, 1999, p. 85) for enhanced collective-action competence, with “good” (self-) governance of well-structured co-operative (network-) arrangements, and a new public policy approach (that interacts in a specific way with that private interaction process

and shapes conditions to support that learning process) has been outlined here. It employs different kinds of incentives and shapes the expectations of the private agents about the future of their interaction so that their common future is important. It focuses on collective learning and institutions-building. It relates, in a specific way (through the meritorization of the goods structure, with the public objectives defined in a negotiated-economy framework), certain policy measures to the “private” interaction system. It also permits the combination of strengths through a clear-cut allocation of responsibilities and benefits of private and public agents.

This approach also allows for sustainable and broad systemic innovation, since it enables recurrent interactions to occur in a more stable framework, for common collective learning processes, the stabilization of future expectations, and publicly negotiated deliberation. The new problems of the “new” economy can be fruitfully dealt with in this framework.

Further analysis, particularly analysis of empirical material and case studies, against this background, should focus on:

- the structure of the basic interdependence and co-ordination problems;
- actual or potential cluster- and network structures, together with their learned institutions and governance rules and cultures;
- the publicly meritorised goods structure and the role of the public policy agent to shape incentives and expectations; and
- the roles of power, hierarchy and the “market”.

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Child income poverty and child deprivation: an essay on measurement

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Keywords *Poverty, Children (age groups), Child welfare, Measurement*

Abstract *This paper is a study on child poverty from two perspectives: child income poverty (derived from family income) and child deprivation (evaluated by non-monetary indicators). On the one hand, empirical evidence supports the thesis that income-based poverty measures and deprivation measures do not overlap. On the other hand, the relationship between poverty and the child's living conditions is not linear. Uses micro-econometric techniques to analyse child income poverty and present deprivation indicators, and thereby an index of child deprivation, to study child poverty. The measurements used are centred on the child. The results obtained support the thesis that the study of child poverty differs whether the focus is on the child or on the family.*

Introduction

Child poverty is a theme of growing interest in the social sciences. The incidence and intensity of the problem have also raised concern in political circles. The statistics suggest that children are a group particularly vulnerable to poverty and generally over represented in the poor population (Bradbury *et al.*, 2001; Bradbury and Jantti, 2001).

This paper deals with child poverty analysed from two perspectives: child income poverty (derived from family income) and child deprivation (evaluated by non-monetary indicators). In spite of the recognised impact of low family income on children, some elements such as the family strategy of life or certain community-associated elements may mitigate this impact. There is a high degree of heterogeneity among poor families.

Children living in poor families do not necessarily experience multiple forms of deprivation (and vice-versa). The family's life strategy, the parents' standard of education or certain community-associated elements may mitigate the consequences of low income for the child (Middleton *et al.*, 1997). Nolan *et al.* (2001) show that children included in households with income below 40 per cent of the median did not present the highest deprivation scores, measured by non-monetary poverty indicators. The children in greatest need are those just below or just above the income poverty line.

Child poverty is usually measured through family income or by examination of the family living conditions.

The first methodology uses the concept of child income poverty as it is based on the family income. The measurements used to evaluate child income poverty derive directly from those assigned to poverty.

The second methodology examines the family living conditions and therefore deprivation. Child deprivation is evaluated through the observation of the family consumption patterns, generally with simple count indexes.



These methodologies consider the family as the statistical unit of observation. The child condition with respect to poverty is indirectly evaluated, through the family.

In this study the child is the statistical unit of observation. We develop specific indicators of deprivation that apply directly to the child. These indicators allow the quantification of child deprivation. We also estimate an econometric model to characterise and evaluate child income poverty.

Our thesis is that child income poverty and child deprivation do not overlap although their association. Furthermore, the study of child poverty differs widely when the focus is on child income poverty or child deprivation.

We introduce in this paper new methodological elements on the study of child poverty. In fact, we focus on the child rather than on the family, we operationalise the concept of child deprivation and we evaluate child income poverty by estimating the probability of the child of being included in a poor family.

The paper is divided in four sections. The first reviews the literature on child poverty. The second develops a methodology to construct child deprivation indicators that enable the definition of indexes to measure the incidence and intensity of child poverty as a state of deprivation. Additionally, in the second section it is presented an econometric method to evaluate child income poverty. In the third section, we compare the empirical results of child poverty according to the two concepts involved in the paper: child income poverty and child deprivation. The final section discusses the theoretical and empirical implications of the principal findings.

Prior research

The pioneering works on child poverty are based on the analysis of family income, identifying child poverty as a component of the more global problem of poverty. The works conducted by Cornia (1990), Bradshaw (1990) and Danziger and Stern (1990) follow this approach. These studies focus on the living conditions of the families with children and are characterised by a macro approach to the problem of child poverty.

In the 1990s, new methodologies were introduced to study child poverty. Oxley *et al.* (2001), Bradbury *et al.* (2001) and Bradbury and Jantti (2001) define a poverty line based on the equivalent income of children. This poverty line lies on the assumption that all family members have the same standard of living as they share equally the family income.

The recent works on child poverty analyse the problem from a dynamic angle (Bradbury *et al.*, 2001; Bradbury and Jantti, 2001) by observing at different moments in time the movements of children with respect to poverty.

Although the innovative methodological elements introduced in the study of child poverty, the focus is roughly on the family.

Recently several authors have referred that the child should be considered as the statistical unit of observation (Qvortrup, 1995) analysed through specific indicators of well-being (Nolan *et al.*, 2001). This methodology privileges the concept of child deprivation and the definition of child deprivation indicators. Nolan *et al.* (2001, p. 213) emphasise this definition when they write: "... a key priority in terms of monitoring and tackling child poverty has to be the incorporation of measures of deprivation relating directly to children themselves into the data sets which serves as the basis for analysis and poverty formulation". Nevertheless, there are no studies so far that develop child deprivation indicators. There is significant research on child well-being

but little agreement on how to best define and measure child well-being (Pollard and Lee, 2003).

Townsend (1979) was a pioneer in the analysis of poverty from a deprivation standpoint. He argued that, deprivation and poverty are two concepts that do not necessarily overlap, since poverty, seen as a shortage of income, is a component of deprivation and not its exclusive determinant. The concept of deprivation is much broader than that of poverty and is linked to the notion of social exclusion. In the EU, in more recent work on poverty the concepts of deprivation and social exclusion predominate, to the detriment of the notion of poverty (European Commission, n.d.). The Observatory on Policies to Combat Social exclusion created by the European Commission in the 1980s reflects the movement from the concept of poverty as lack of income to the concept of exclusion or deprivation.

The relationship between poverty and deprivation is a controversial issue. Authors such as Wilson (1987) and Massey *et al.* (1994) consider poverty to be strongly associated with deprivation, and, in fact, its principal determinant. This relationship is clearly expressed by Massey *et al.* (1994, p. 426) when they write: "... the intense clustering of poor people in neighbourhoods leads to a concentration of other deleterious social and economic circumstances associated with poverty".

However, authors such as Townsend (1987), Sen (1995) and Room (1995) assume a different position regarding this issue. Townsend (1987, p. 131) argues that: "... people experiencing some forms of deprivation may not all have low income", a thesis corroborated by Sen (1995, p. 113) when he writes: "... the extent of deprivation may be under-judged if we concentrate only on the size of incomes". According to these authors, a strong correlation cannot be established between poverty and deprivation. Poverty, as a shortage of income, is rather one form of deprivation. Family structure and race/ethnicity have a greater impact on deprivation, irrespective of the income level.

Various studies of child well-being have also given rise to controversial results concerning the relationship between the level of child deprivation and family income. On this subject, Middleton *et al.* (1997, p. 5) state that: "... parents are more likely to go without than children; one half of parents defined as 'poor' themselves have children who are found to be 'not poor'". In fact different studies have shown that not all children from poor families experience serious deprivation (Garmezy, 1993). Nolan *et al.* (2001) suggest that the analysis of the problem of child poverty includes the observation of non-monetary indicators that can be used to evaluate the situation of child deprivation and, implicitly, of well-being. However the indicators of deprivation defined by the above authors to assess child poverty apply to the family and not to the child. Moreover these indicators are derived from the European Community Household Panel survey with no specific methodology of construction.

Methods and data

Conceptual framework

In this paper we analyse child poverty through two different approaches: the classical one, based on the observation of family income and the deprivation perspective, sustained by the examination of the child consumption pattern. These approaches are associated with two concepts of child poverty: child income poverty, derived from family income and child deprivation, evaluated by non-monetary indicators.

We say that a child suffers from child income poverty if he/she is included in a poor family (in the sense of income scarcity) and the child is deprived (or suffers from child deprivation) if he/she does not have a consumption pattern generally accepted (is disadvantaged in economic, social and interpersonal terms).

To characterise and evaluate child income poverty we estimate a logit model that specifies the variables that distinguish children included in poor families from those in non-poor families and gives the probability of a child suffer from child income poverty.

In order to study child deprivation we define deprivation indicators[1] and analyse their statistical distribution to establish the cut-off points. A count index of deprivation measures de extent and intensity of child deprivation.

The data used in this paper comes from a survey sampling applied to roughly 2,000 randomly selected children aged 5-14 out of 6,100, in official Lisbon primary schools. The sample design uses a stratified sample, proportional to the strata dimension. The instrumental variable for stratification was the school[2].

Children in the sample were classified as poor or non-poor according to the family situation regarding poverty (considering the threshold of a poverty line – child income poverty concept was used).

The issues included in the survey reflect the different dimensions of deprivation associated with child poverty. Five categories of variables were defined[3]: family living conditions; housing; health; education; and social integration.

Child deprivation

We measure child deprivation through a deprivation index based on survey results. The items included in the survey evaluate children's lifestyle and therefore enable the analysis of child deprivation.

To construct the index we first calculate the mode and the median of the children answers to each of the items considered. Further, we create binary variables that took values 0/1 if the answer is above/under the mode/median (cut-off point), respectively. Value 1 means that the child is considered deprived in that particular item or deprivation indicator.

Summing up the disadvantages we obtain a score of deprivation for each child that is higher the more deprived is the child. Dividing this score by the total number of effective answers (missings excluded) we get a score index of deprivation – child deprivation index (CDI). The child is more deprived the closer this index is of 1.

Figures 1 and 2 show that the deprivation index is robust to the use of mode or median in its construction. The Pearson correlation among the indices is 0.986, significant at 1 per cent level. We accept the hypothesis of equal means of the two indexes at 0.01 per cent level. Therefore there is no differentiation on using the mode or the median to calculate the index.

The index results range between 0.025 and 0.725 with a mean value of 0.284. According to the figures above, children included in the sample present generally low levels of deprivation. 75 per cent of the children register an index value below 0.4971 and half of them present an index value lower than 0.3622.

Based on the deprivation index we classified children in deprived and non-deprived, respectively, if their score index is above or under the mode (median) of the score index variable[4].

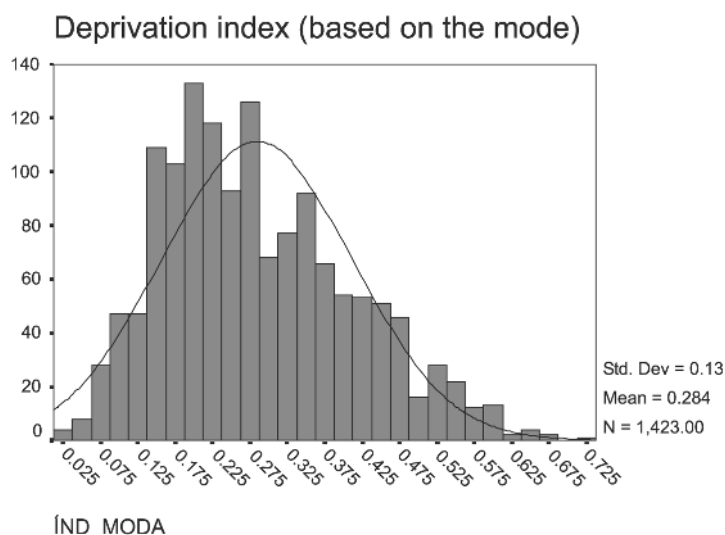


Figure 1.
Deprivation index – mode

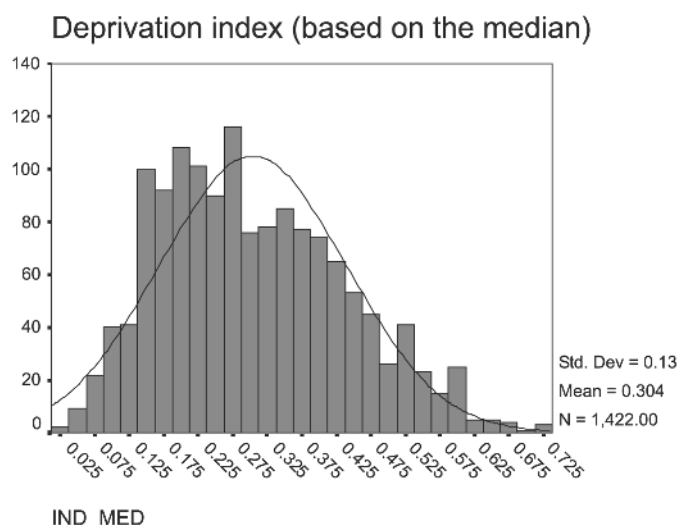


Figure 2.
Deprivation index – median

Table I shows, for each deprivation indicator, the proportion among the deprived and non-deprived children, considering the mode and the median as cut-off points.

The statistics show that for each of the items considered, the proportion of those children qualified as deprived is always bigger, and sometimes much bigger, than the correspondent to non-deprived. According to these figures, the items that give a greater contribution to shape a deprived situation or that most strongly distinguish the deprived children from the non-deprived, are: race, number of brothers, school failure, type of housing and presence of person to sleep with. A second order of deprivation

	Mode	Median		Mode	Median
Race			Comes alone from school		
Deprived	20	26.9	Deprived	48.6	61
Non-deprived	2.7	4	Non-deprived	9.5	15.3
Live with both parents			Seldom goes to doctor		
Deprived	59.8	54.5	Deprived	20.2	24.5
Non-deprived	90.3	81	Non-deprived	6.7	8.8
Have more than two brothers			Seldom goes to dentist		
Deprived	30.7	38.7	Deprived	39.6	46.6
Non-deprived	5	9.1	Non-deprived	12.1	18
Mother school level < 7th			Bath more than thrice a week		
Deprived	59.8	74.4	Deprived	71.7	70.4
Non-deprived	20.8	22.9	Non-deprived	87.7	81.4
Father school level < 7th			Don't wash teeth daily		
Deprived	56.9	70.2	Deprived	26.3	32.3
Non-deprived	19.5	23.8	Non-deprived	9	11
Father unskilled			Balanced breakfast		
Deprived	68.9	78	Deprived	37.8	37.1
Non-deprived	35.8	43.3	Non-deprived	20.1	29.5
Mother unskilled			Balanced dinner		
Deprived	55.3	63.8	Deprived	79.1	62.9
Non-deprived	17.2	26.3	Non-deprived	95.1	91.2
Mother unemployment			No food at home besides meals		
Deprived	11.2	13	Deprived	7	9.4
Non-deprived	4.7	5.9	Non-deprived	0.3	1
Father unemployment			Go to bed after 11.30		
Deprived	6.1	8.2	Deprived	43	47.3
Non-deprived	1.7	1.9	Non-deprived	20	27.1
Family budget short			Base housing		
Deprived	53.7	61.7	Deprived	33.7	43.9
Non-deprived	17.7	26.8	Non-deprived	3.6	7.8
Parents have a car			Less than 11 equipment goods types		
Deprived	60.4	49.7	Deprived	61.5	72.5
Non-deprived	95.2	89.4	Non-deprived	12.8	24.9
School failure more than once			No bedroom		
Deprived	14.7	19.4	Deprived	6.6	8.2
Non-deprived	1.1	2.7	Non-deprived	1.9	2.6
No help in home work			Sleep with no family members		
Deprived	21	25.4	Deprived	13.3	17.1
Non-deprived	7.2	9.2	Non-deprived	1.7	3.2
Doesn't like school			More than one extra school activity		
Deprived	3	3.6	Deprived	41.4	35.3
Non-deprived	1.4	1.6	Non-deprived	76.3	65.8
Goes alone to school			Be at home at weekends		
Deprived	47.7	59.3	Deprived	39.2	44.5
Non-deprived	8.6	14.8	Non-deprived	20.1	23.8
Walk to school			Holidays at home		
Deprived	63.6	71.8	Deprived	29.3	36.3
Non-deprived	39.2	42.5	Non-deprived	5.3	9.6

(continued)

Child income
poverty and
child deprivation

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Table I.
Deprivation indicators
statistics

Table I.

	Mode	Median		Mode	Median
Seldom read books			Street as usual playground		
Deprived	46.7	50.6	Deprived	29.5	34.5
Non-deprived	25.3	31.5	Non-deprived	11.4	15
Less than seven different kind of toys			Would like to wear better clothes		
Deprived	51.5	60.3	Deprived	46.6	53.4
Non-deprived	13.4	22.6	Non-deprived	20.4	25.9
Clothes not enough to protect from cold					
Deprived	7.7	9.4			
Non-deprived	4	4.1			

characteristics seem to be related with parent's scolarity and skill levels, unemployment and family monetary constraints.

The deprived children are also characterised by having a deficit in terms of: parents school support (in doing home work or accompanying them to/from school), health cares (go to the doctor or the dentist at least once a year, wash teeth daily, go to bed before 10.00 pm) or attendance of cultural events (going to movies, theatre, etc.).

Child income poverty

Our purpose in this point is to characterize child income poverty, measured as a 0-1 binary variable, from a large set of (explanatory) variables using the logit regression model. This set of explanatory variables includes variables characterizing child family, school attendance, health, housing and social insertion. All these variables are directly related to the child, the statistical unit of observation considered. The full meaning of all variables in the model is presented at Table I.

The estimated coefficients and statistics are presented in Table II. The model is globally acceptable.

The model highlighted factors related to the family and factors associated with the various dimensions of well-being (schooling, health, housing and social integration) included in the survey. These factors characterise children's well-being from an economic and social standpoint and can be found in various empirical studies, such as; Bastos (1999), Nolan *et al.* (2001) and Pollard and Lee (2003).

The variables included in the estimated model are: race (X_1 , X_2 , X_3 , X_4), family type (X_5), family size (X_6), parents' skill level (X_7 , X_8), father labour market insertion (X_9), budget constraints (X_{10}), existence of private car (X_{11}), number of failures at school (X_{12}), children feeling about school (X_{13}), visits to the dentist (X_{14}), teeth habits (X_{15}), balanced breakfast (X_{16}), balanced dinner (X_{17}), sleep hour (X_{18}), housing type (X_{19}), house equipments (X_{20}), extra-curricula activities (X_{21}), holidays place (X_{22}), toys (X_{23}) and an interaction variable between housing type and preferred place to play (X_{24}).

According to the estimated coefficients, the variables that most distinguish children included in poor families from those in non-poor families are: the race (being from a foreign country), family size (having more than one brother), parent's skill level (high level of qualification), perception of budget constraints by the child, school failure (having two or more failures), children feeling about school, balanced breakfast and dinner, sleep hour (before 10.00 pm), extra-curricula activities (having two or more

Variable	Estimate	Std error	t-statistic
Const	0.6920	0.5389	1.2840
X_1	0.3173	0.1767	1.7956
X_2	0.7200	0.7522	0.9572
X_3	1.6338	0.4219	3.8725
X_4	0.4212	0.3312	1.2715
X_5	-0.4570	0.1892	-2.4149
X_6	0.8312	0.1740	4.7781
X_7	-0.3659	0.1843	-1.9855
X_8	-1.5278	0.4367	-3.4984
X_9	-0.3944	0.1886	-2.0913
X_{10}	1.2006	0.1720	6.9808
X_{11}	-0.3570	0.1987	-1.7968
X_{12}	0.9943	0.3011	3.3019
X_{13}	-0.9632	0.4364	-2.2072
X_{14}	-0.2026	0.1773	-1.1428
X_{15}	-0.5237	0.1966	-2.6635
X_{16}	0.6973	0.4516	1.5439
X_{17}	-0.5801	0.2080	-2.7892
X_{18}	0.5733	0.1841	3.1134
X_{19}	0.4334	0.1922	2.2548
X_{20}	-0.4098	0.2018	-2.0306
X_{21}	-0.5134	0.2298	-2.2337
X_{22}	0.4270	0.2124	2.0105
X_{23}	-0.3593	0.1831	-1.9623
X_{24}	0.7950	0.3099	2.5656

Notes: Number of observations, 1066; number of positive observations, 403; R^2 , 0.408; fraction of correct predictions, 0.799; LR (zero slopes), 496.3; log likelihood, -458.7

Table II.
Estimated results

activities) and the interaction variable of housing type (poor habitat) and preferred place to play (street).

On the basis of the estimated model, we can defined a measure of child income poverty – Child Income Poverty Index (CIPI) – as the child’s probability of being included in a poor family.

Child deprivation and child income poverty: empirical evidence

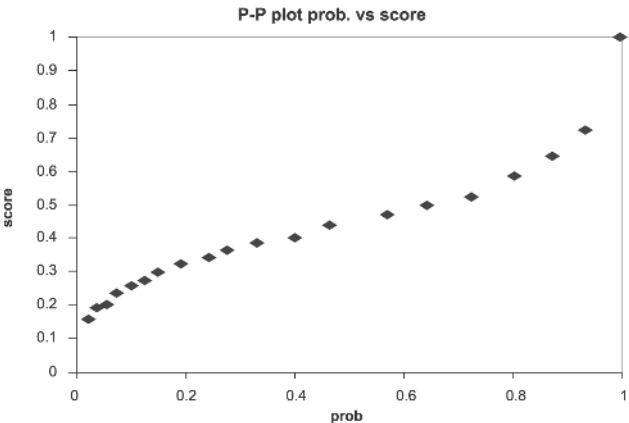
In this section we compare the results obtained from the two indexes of child poverty presented in this paper: CDI and CIPI. This comparison will enable a first validation of our thesis that child income poverty and child deprivation do not overlap although their association.

From Table III which shows the mean, median and mode for the distribution of child deprivation and child income poverty indexes and from Figure 3 that presents the

	CIPI	CDI
Mean	0.378	0.3908
Median	0.2786	0.3622
Mode	0.02	0.27

Table III.
Child deprivation index
and child income poverty
index

Figure 3.
p-p plot for CIPI and CDI



p-p plot for the two indexes referred above, it is clear that these two distributions are highly correlated (Pearson, 0.789; Spearman, 0.791) and pretty similar. A test of independence between the two indexes is rejected (*p*-value = 0.000 ...).

Apparently the two indexes seem to overlap and, if this is true, there is no need for the two concepts of child poverty analysed in this paper.

Let us now probe more deeply in the comparative analysis of the two indexes. Table IV presents the results obtained from the cross classification of children according to the quartiles for the distribution of the two indexes, $Q_i(i = 1, 2, 3, 4)$ [5]. If we classify children as deprived or poor if they have an index bigger than the respective median, 10 per cent of children classified as non-deprived are poor and 9 per cent of the deprived are not poor. Child income poverty and child deprivation do not seem to overlap, our baseline hypothesis

Discussion and conclusion

Results provide evidence that support the social disorganization theory (Wilson, 1987; Massey *et al.*, 1994) that points poverty as the main determinant of deprivation. In fact most of the deprived children is also considered poor. However not all poor children are deprived and not all deprived children are poor, also providing evidence in support of the social exclusion thesis (Townsend, 1987; Sen, 1995) that consider poverty and deprivation independent. Our initial hypothesis comes directly from the social exclusion theory as we focus not strictly in child income poverty but extend to the disadvantages that children experience in their lifestyle. Therefore the results obtained

Table IV.
Cross classification of
children according to the
distribution of the CIPI
and CDI

CIPI	CDI				Total
	Q_1	Q_2	Q_3	Q_4	
Q_1	182	83	18	1	284
Q_2	64	108	69	8	249
Q_3	19	70	107	72	268
Q_4	2	15	54	194	265
Total	267	276	248	275	1,066

go with this hypothesis, showing that child income poverty and child deprivation do not overlap although their association. The analysis of child poverty differs whether we focus on one concept or on the other.

The results obtained are in keeping with the conclusions reached by Nolan *et al.* (2001) and Guthier (1999) regarding the relationship between family income and child deprivation.

In this paper we present two indexes of child poverty that come from the operationalisation of two concepts: child income poverty and child deprivation. The methodology used in the definition of these measurements introduced new elements in the study of child poverty.

We examine the relationship between the two concepts referred above and the results obtained by the empirical study support our initial thesis that these concepts do not overlap.

The empirical analysis has two main implications: on the one hand, the study of child poverty differs whether we focus on the child or on the family, on the other hand, child income poverty and child deprivation do not entirely overlap although their association.

To construct CDI we could select the deprivation indicators by applying statistical techniques such as principal components. However the results were similar to those presented, regarding the comparison of the two child poverty concepts used in the paper. We think that the selective procedure of deprivation indicators needs further research.

Notes

1. The definition of deprivation indicators derives from Bastos (1999).
2. There is no database on children's well-being produced by the National Institute of Statistics in Portugal and that is the reason why we had to carry on the survey.
3. The choice of the variables included in the survey was determined by theoretical and empirical considerations. These were the categories presented by Bastos (1999) that can also be found in other works such as Silva (1989) and Nolan *et al.* (2001).
4. This methodology can also be found in Muffels and Vreins (1991).
5. $Q_2 = (0; \pi_{0.25}]$, $Q_2 = (\pi_{0.25}; \pi_{0.5}]$, $Q_3 = (\pi_{0.5}; \pi_{0.75}]$, $Q_4 = (\pi_{0.75}; 1]$

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Globalization and inequality according to Veblen

Globalization
and inequality

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Abstract *Thorstein Veblen's ideas regarding capitalism, particularly as expressed through his view of the American upper classes of the time, are examined. The work of Veblen himself, as well as other, later economic theorists, is discussed. Particular attention is paid to how Veblen's ideas can be applied to today's social economy, especially where globalization and inequality are concerned.*

The best chance you have of making a big success . . . is to decide from square one that you're going to do it ethically.

I

Thorstein Veblen was not a gentleman. Nor were his *bêtes noires* – the American upper class rich. But they were luckier.

They began and continued their career to riches as the instigators of the extermination of the Indians, which enriched them through land seizures and land speculations. They improved the value of a major part of the land through shipments of slaves into the American economy. They capitalized on their wealth to stage-manage a revolution that gave them control of the polity to complement their command of the economy. They remained united until a splintering brought on the next major war, which was a civil war. The southern élite remained slave owners whilst the northern élite had come to be a couple of generations away from the actual slave trade, and had forgotten that it had contributed significantly to their wealth. The northerners had, in the meantime, shifted their investment interest to exploiting a piracy of inventions coming mostly from Europe. The inventions often happened to require as well as lead, through ramifications in the economy, to an extensive capital plant, and the construction and investment, stock flotations and mergers, monopolizations and cartelizations greatly enlarged their wealth. Veblen's writings were mostly concerned with the ensuing period in American history at the latter part of the nineteenth century. His words, nevertheless, remain germane to the current scene.

His vision of upper class interest was portrayed in vivid detail in his most famous book, *The Theory of the Leisure Class* (Veblen, 1899). It was a reasonable depiction of a reality that goes back into the distant past. His description and analysis of the operation of that interest came later in a series of books, *The Theory of Business Enterprise* (Veblen, 1904), *The Instinct of Workmanship and the State of the Industrial Arts* (Veblen, 1914) and *Absentee Ownership and Business Ownership in Recent Times* (Veblen, 1923). Although his concern was principally his own times, the story is an old and continuing one. The interest rested and rests on control of one or more crucial factors be they military might or land or capital.

Upper class control need never be complete. Peasant militias can have existed without endangering feudal control so long as the militias were no match to armored horsemen. Stock ownership can be widespread without interfering much with



capitalist- managerial decision making any more than the electorate in general has much voice in political decision making:

Representative government means, chiefly, representation of business interests. The government commonly works in the interest of the business men with a fairly consistent singleness of purpose. And in its solicitude for the business men's interests it is borne out by current public sentiment, for there is a naive, unquestioning persuasion abroad among the body of the people to the effect that, in some occult way, the material interests of the populace coincide with the pecuniary interests of those business men who live within the scope of the same set of governmental contrivances. This persuasion is an article of popular metaphysics, in that it rests on an uncritically assumed solidarity of interests, rather than on an insight into the relation of business enterprise to the material welfare of those classes who are not primarily business men (Veblen, 1904, pp. 286-7).

The master class need not be any more unified in either thought or action than any group. A diversity of opinion and behavior can characterize much of a group life without preventing a rapid coalescing whenever the occasion arises. The feudal lords of yore were notorious for warring, intrigue and treachery until their rule was threatened by peasant revolts. Then they donned their suits of armor, leapt onto their horses and cheerfully in boisterous unity rode down and slaughtered the peasant swarms. Veblen believed there was much in common between the feudal barons and the capitalist rich:

Gradually, as industrial activity further displaces predatory activity in the community's everyday life and in men's habits of thought, accumulated property more and more replaces trophies of predatory exploit as the conventional exponent of prepotence and success. With the growth of settled industry, therefore, the possession of wealth gains in relative importance and effectiveness as a customary basis of repute and esteem. Not that esteem ceases to be awarded on the basis of other, more direct evidence of prowess; not that successful predatory aggression or warlike exploit ceases to call out the approval and admiration of the crowd, or to stir the envy of the less successful competitors; but the opportunities for gaining distinction by means of this direct manifestation of superior force grow less available both in scope and frequency. At the same time opportunities for industrial aggression, and for the accumulation of property by the quasi-peaceable methods of nomadic industry, increase in scope and availability. And it is even more to the point that the property now becomes the most easily recognized evidence of a reputable degree of success as distinguished from heroic or signal achievement. It therefore becomes the conventional basis of esteem (Veblen, 1899, pp. 28-9).

He conceded that the *modus vivendi* of the corporate capitalists was not completely identical to the warrior raiders or the feudal overlords or the aristocratic gentry. But the objective was the same. It was to obtain some part of the output produced by working peoples. In the case of the raiders, the surplus was a pure gain if one ignores the cost to the raiders of being injured by defending tribesmen. Both the feudal and aristocratic lords provided the land and sometimes a species of protection, and the regular factor rewards were inextricably mixed with a pure surplus. The corporate capitalists provided capital and sometimes managerial services that were also mixed, in reality albeit not in economic theory, with a surplus:

Industry is carried on for the sake of business, and not conversely; and the progress and activity of industry are conditioned by the outlook of the market, which means the presumptive chance of business profits.

All this is a matter of course which it may seem simply tedious to recite. But its consequences for the theory of business make it necessary to keep the nature of this connection between business and industry in mind. The adjustments of industry take place through the mediation of pecuniary transactions, and these transactions take place at the hands of the business men and are carried on by them for business ends, not for industrial ends in the narrower meaning of the phrase.

The economic welfare of the community at large is best served by a facile and uninterrupted interplay of the various processes which make up the industrial system at large; but the pecuniary interests of the business men in whose hands lies the discretion in the matter are not necessarily best served by an unbroken maintenance of the industrial balance . . . To the business man who aims at a differential gain arising out of interstitial adjustments or disturbances of the industrial system, it is not a material question whether his operations have an immediate furthering or hindering effect upon the system at large. The end is pecuniary gain, the means is disturbance of the industrial system, – except so far as the gain is sought by the old-fashioned method of permanent investment in some one industrial or commercial plant, a case which is for the present left on one side as not bearing on the point immediately in hand. The point immediately in question is the part which the business man plays in what are here called the interstitial adjustments of the industrial system; and so far as touches his transactions in this field it is, by and large, a matter of indifference to him whether his traffic affects the system advantageously or disastrously. His gains (or losses) are related to the magnitude of the disturbances that take place, rather than to their bearing upon the welfare of the community.

The outcome of this management of industrial affairs through pecuniary transactions, therefore, has been to dissociate the interests of those men who exercise the discretion from the interests of the community . . . It is, as a business proposition, a matter of indifference to the man of large affairs whether the disturbances which his transactions set up in the industrial system help or hinder the system at large (Veblen, 1904, pp. 26-30).

Although plunder, land and capital had value and yielded returns in kind and money, their significance lies elsewhere. Its possession gave an élite the means for the exercise of power, which enabled the master class to build an edifice of authority over much of the life of the entire community. Veblen amply described the processes (Veblen, 1899). They include some processes and institutions that inculcate sentiments and feelings of commonality and superiority among the masters, and others drilling feelings among the underlings of deference, respect and obedience to both the persons and the ideologies of the masters. A crucial element in the exercise of power is control over the community's means of communication and transportation, and castles at the crossroads served the same purposes in the past as the contemporary ownership of the press and television now serves.

The exercise of power is multifaceted. One aspect is the recruitment of collaborators from among the populace of lesser persons in the social scale. They have been younger and stronger peasants trained as men-at-arms to beat peasants into submission, slaves promoted to slave drivers, prisoners set as the guards in concentration camps, and the entrepreneurs so much honored by professional economists.

There is a parallel between the entrepreneur and the slave driver. Both served an upper class interest. Both were dependent on upper class favor: the slave driver for the slaves to be driven at work on the land, the entrepreneur for the financial support to fund the enterprise. Both yielded a payoff to the élite: the slave driver racked up rents on the land, the entrepreneur churned up profits and dividends for financial backers. Both sometimes were successful in moving into the ranks of the élite: the slave driver

sometimes became a slave owner, the man-at-arms was sometimes knighted, and the managerial entrepreneur sometimes became a part owner of the enterprise. Each could sometimes have been born into the upper class although all except the entrepreneur were typically lower class in origin. Each was the epitome of predatory selfishness:

In the last analysis the nation remains a predatory organism, in practical effect an association of persons moved by a community interest in getting something for nothing by force and fraud (Veblen, 1923, p. 442).

The two barbarian traits, ferocity and astuteness, go to make up the predaceous temper or spiritual attitude. They are expressions of a narrowly self-regarding habit of mind. Both are highly serviceable for individual expediency in a life looking to invidious success. Both also have a high aesthetic value. Both are fostered by the pecuniary culture. But both alike are of no use for the purposes of the collective life (Veblen, 1899, p. 275).

II

Human history, or at least its supposedly romantic part, can be summed up as the hunt for parasitic gain. Its beginning can probably be set as two or more millions of years of tribal slaughterings with the tribal chieftains being the principal decision makers over the place and timing of the raids as well as being the big gatherers of the booty from successful raids. With the coming of agriculture as the main form of economic activity of humans, the focus of warring in most of the last 10,000 years of recorded history became more narrowly centered on the hunt for land and slaves to work it. The payoff could be enormous. Some decades of successful warring could transform a peasant-like aristocracy of the Roman republic into a fabulously wealthy senatorial class with vast landed estates, strewn around the Mediterranean basin, worked by hordes of slaves (Rawson, 1976, p. 91; Frank, 1975, Vol. 1, pp. 296-301, pp. 387-402). A single victory could enable a Norman aristocracy to eliminate the resident Saxon aristocracy, keep the Saxon serfs, seize much of the arable land in England and accordingly provide the economic base for their descendants to rule the country for almost a thousand years.

Capitalist decision making is not identical to the tribal or the feudal or the aristocratic except for its nature and purpose which is to supplement ordinary factor returns with additional, and oftentimes much larger, parasitic gains. The decision makers run the economic system that is not explicitly designed to service the mass of cyphers who make up the bulk of the population. It uses them. Their rewards can have some connection with the marginal products of their services, as evaluated by their masters, in the operation of whatever is the economic system in place. It serves the masters. Their rewards come partly through the marginal products of accumulations from the past of land and capital, and partly through manipulations which can include booty, land and stock grabbings that, in turn, largely reflect the distribution of power within the relevant élite. There is nothing inevitable about the operation of economic systems. They are only human contraptions with a decision making that is never systematic nor invariant nor deterministic. If a generalization can be made about them, it is likely that the decision making primarily caters to the interests of the decision makers.

In capitalism, the decision making is done by a capitalist-managerial élite lodged in the modern corporation where they decide on their own rewards. The same

nebulous character holds for them as any of the former masters. Not all were born into the upper class, not all the upper class are among the decision makers, not all the decision making is centered in the corporation. Governments also make some of the decisions. In the world of representative democracies, they are, however, controlled and dominated by the upper class through the purchase of elections, office and influence:

The management of the affairs of the community at large falls by common consent into the hands of business men and is guided by business considerations. Hence modern politics is business politics, even apart from the sinister application of the phrase to what is invidiously called corrupt politics. This is true both of foreign and domestic policy. Legislation, police surveillance, the administration of justice, the military and diplomatic service, all are chiefly concerned with business relations, pecuniary interests, and they have little more than an incidental bearing on other human interests (Veblen, 1904, pp. 268-9).

Their hunt for surpluses is less blatant than booty or land grabbing, which is fortunate for them as too much reliance on overt force would blow the democratic cover. The hunt is rather lost from a public gaze into the toils of corporate finances. More significantly, the gains arise in the creation of producer surpluses that rest on the technical particularities of production and distribution, which is pretty much a closed book to the public or the economists or even to the decision makers themselves except for the consequences in corporate finances:

Technological knowledge and proficiency is in the main held and transmitted pervasively by the community at large, but it is also held in part – more obviously because exceptionally – by specially trained classes and individual workmen. Relatively little, in effect a negligible proportion, of this technological knowledge and skill is in any special sense held by the owners of the industrial equipment, more particularly not by the owners of the typical large-scale industries . . . In effect, therefore, the owners of the necessary material equipment own also the working capacity of the community and the usufruct of the state of the industrial arts. Except for their effective ownership of these elements of productive efficiency, their ownership of the material equipment of industry would be of no effect . . . In what has just been said above, the view is implied that the owners of the material means, who are in great part also the employers of workmen and are sentimentally spoken of as “captains of industry,” have, in effect and commonly, but a relatively loose grasp of the technological facts, possibilities, and requirements of modern industry, and that by virtue of their business training they are able to make but a scant and uncertain use of such loose ideas as they have on these heads (Veblen, 1914, pp. 219-21).

In Veblen’s time, the pace of scientific advance quickened appreciably, and brought rapid and sometimes far-reaching changes in the underlying technical foundations for production and distribution. The opportunities for picking off surpluses came and went, but the total amounts grew apace and readily account for the wealth of the infamous robber barons:

In this new era technology comes into close touch with science; both the science and technology of the new age being of a matter-of-fact character, beyond all precedent (Veblen, 1914, pp. 302-3).

What threw the fortunes of the industrial community into the hands of the owners of accumulated wealth was essentially a technological change, or rather a complex of technological changes, which so enlarged the requirements in respect of material equipment

that the impecunious workmen could no longer carry on their trade except by a working arrangement with the owners of this equipment; whereby the discretionary control of industry was shifted from the craftsmen's technological mastery of the ways of industry to the owner's pecuniary mastery of the material means (Veblen, 1914, pp. 228-9).

Scientific and technical advances have not yet made labor superfluous, and Marx's intuition probably still holds that the surplus, at any given state of technology, is tied to the labor force:

It serves to create surplus value, which smiles upon the capitalist with all the charms of an entity created out of nothing. This part of the working day I term, surplus labour time; and all the labour expended in it I term surplus labour . . . What distinguishes the various economic types of society one from another (distinguishes, for instance, a society based upon slavery from a society based upon wage labour) is nothing other than the way in which surplus labour is extorted from the actual producer, from the worker (Marx, 1930, Vol. 1, p. 214).

Whatever is the actual connection, the best evidence confirming Marx's contention is the steady and fervid interest of the predators in labor whether composed of tribal prey, slaves, serfs, peasants or factory fodder. The élite's interest in obtaining cheap labor continued into Veblen's day when, fortunately, radical improvements in the technology of transportation brought such a cheapening and easing of the hardship of movement that free immigration could be relied upon to fill the ranks of labor.

Veblen did not live to see the impact of further improvements in the technologies of communication and transportation. They have made the actual movement of labor somewhat obsolete in a global economy in which cheap labor need no longer be moved about the economy. It can, instead, be left abroad to work in local sweat shops with the products being shipped elsewhere in the world.

Not everyone may benefit from the decision making within an economic system, and the current pattern of globalization is no exception. It could hurt many people. It is the old story of decision making mostly benefiting the decision makers:

Such business control of industry, as has just been remarked above, is exercised with a view to pecuniary gain; but pecuniary gain in these premises comes from changes, and apprehended changes, in the efficiency of the various industrial processes that are touched by such control, rather than the work-day functioning of the several items of equipment involved. The changes which so bring gain to these larger businessmen may be favourable to the effective working of industry, but they may also be unfavourable; and the opportunities for gain which they afford the larger businessmen may be equally profitable whether the disturbance in question is favourable or unfavourable to industrial efficiency. The gains to be derived from such disturbance are proportioned to the magnitude of the disturbance rather than to its industrial productiveness (Veblen, 1914, pp. 353-4).

A worst scenario is, of course, possible in a presumably much more distant future. The Marxian connection might be broken. If science should ever make labor almost completely superfluous, the output of goods and services would continue and the decision makers would continue to be conveniently placed to gather the parasitic surpluses. Then capitalism could do yet another extermination except in this case it would be us – the masses of ordinary nobodies thrown out of employment and starving, like the Indians, to death.

III

In the meantime, it may be worthwhile looking at some data. Statistics do not give proofs. Nevertheless, they sometimes can somewhat corroborate opinions. They bear out Veblen's.

For Veblen, advances in the sciences and the technical had become the primary mover, as the main source of invention that brings changes throughout the economy (Veblen, 1904, pp. 5-19; 1906, pp. 585-609; 1914, pp. 299-355; 1923, pp. 251-83). Veblen was not alone in considering science as having become the fundamentally significant agent in bringing change in the economy:

It is completed in large-scale industry, which detaches science from labour, making of science an independent force of production, and pressing it into the service of capital (Marx, 1930, Vol. 1, p. 382).

Inventions also occurred earlier in the past when the sources were different, and more craftsmanship and work experience. No matter what the origin, they tend to be used by whatever is the principal kind of productive and distributive agency in the economy. In prehistoric times, it was the hunter; in modern times, it is the business enterprise commanded by the nation's social leaders. They are not always cognizant of the opportunities. Even when cognizant, their perceptions are likely to be slanted towards opportunities especially favorable to themselves. Sometimes the opportunities relate to the needs of the economy, and many of the general public may benefit if the opportunities are met. Sometimes they are merely chances for gain to the élite. Sometimes they are ignored because the prospect of that gain is not great.

The gain, itself, is likely to have its own life history. It first falls into the laps of the upper ranks of business management who determine their own rewards and are in good positions to concoct sources of scarcity giving rise to the creation of producer surpluses. They may also benefit through the rise in the value of any stock ownership in the enterprise, and react to distribute more in the form of dividends, in which case the more passive financial backers may, in time, benefit. Whatever are the patterns in amounts and timing of the gain, it goes primarily to the capitalist-management élite who command the economy. The rest of the population may also benefit, although usually after some time, though the provision of newer or cheaper commodities and services to the economy. Some people can, on the other hand, be hurt through a lessening demand for their services.

Globalization is one of the ways in which the prime movers open up opportunities for the predators. Veblen lived during an earlier period of escalated globalization when the transport of raw materials and bulk products and workers markedly improved. Our years at the end of the twentieth century see a different form of globalization: advances in the technology of transportation and communication opened up easy access to sweat shops throughout the world.

Any attempt to find a statistical connection between globalization and inequality is a possible waste of time. American income inequality is marked, with a Gini coefficient being around 0.46 for earnings inequality as of 1989 (Levy and Murnane, 1992, p. 1343). It has continued to rise as has income inequality (Gottschalk and Smeeding, 1997, pp. 642-5), although income inequality is not particularly high in America and Western Europe compared to the rest of the world (Milanovic, 2002, p. 66).

It is not easy to disembrace changes in income inequality to particular causal influences. Nevertheless, a considerable effort has been expended in trying to isolate the influence of recent globalization. Unfortunately, it concentrates on possible changes in the incomes of various categories of nobodies such as the skilled versus unskilled workers. The economy's decision makers are ignored. Their pickings are most likely to follow closely on favorable economic changes, but are also likely to come so much in underhanded ways that a statistical tracking is impossible.

Nor are measures of wealth inequality much use. On the one hand, some of the pickings will, in time, tend to be capitalized albeit in much different forms, and increase the wealth of the decision makers. On the other hand, the wealthy are a social class with a wide divergence between individuals in their part in decision making. Even the more important decision makers, themselves, are a mixed bunch and the largesses may be passed in various ways to various individuals. At one extreme, they can go to the larger financial backers who share in some of the decision making. At the other extreme, a trickling may go to junior persons in the corporate hierarchy who have clearly demonstrated a keen willingness to serve their superiors in corporate shenanigans, which is a process of self-selection that perpetuates the predation from generation to generation.

Wealth inequality is, however, even more extreme than income inequality. In 1995, the top one percent of American families is estimated as owning almost 40 percent of the nation's wealth in terms of net worth and almost 50 percent in terms of financial wealth (Wolff, 1998, p. 136).

The inequality has been high for some time. The Gini coefficient for total assets has been estimated as 0.64 in the America of 1774, and rose to 0.83 in 1860 and 1870 (Williamson and Lindert, 1980, pp. 38-9). At the beginning of the twentieth century, a Federal Trade Commission estimate, based on probate estate valuations, set the Gini coefficient at 0.92 in 1912 (Williamson and Lindert, 1980, p. 50). A study of the wealth distribution in industrial New England (Steckel and Moehling, 2001, p. 169) also gave a rise in inequality at the turn of the century when Veblen lived to see a remarkable rise in migration and trade flows. That bout in globalization was characterized by income inequality rising in America at the same time as it fell in the European countries that were important sources of the migration of workers to America (Williamson, 1997, pp. 126-7).

World War I brought an abrupt halt to any further trend towards globalization, and the post-war peace saw only minor changes in inequality, which, however, gyrated considerably in the subsequent years:

The long-run record based on original and unadjusted estate data (individual based estimates) shows a decline in wealth concentration in the United States from the late 1920s to the late 1940s, a slight increase in the 1960s, a sharp drop in the 1970s, followed by a minor increase in 1981. These trends are robust to corrections for inconsistencies in the national balance sheet data and in wealth definitions and to most other adjustments (Wolff and Marley, 1989, p. 814).

Globalization is widely considered as surging ahead in the last decades of the twentieth century. So has the inequality of wealth. The Gini coefficient of net worth rose from 0.80 in 1983 to 0.87 in 1995, while its value in financial assets rose from 0.90 to 0.94 in the same period (Keister, 2000, p. 64).

Veblen, if he still lived, might be gratified by these statistics. But not necessarily. He would probably feel that globalization is only an instance of predatory endeavors, which comprise the essential character of capitalism and date back millions of years to whenever a human first preyed on another human.

IV

Present-day readers need not share Veblen's antipathies towards the American upper class to get enlightenment from his writing. It can help them understand certain of the peculiarities of managerial compensation: how American corporate management receive salaries and benefits that are multiples, on the average, of those in the comparative economies of Western Europe; how the American managerial salaries and bonuses appear exorbitant, particularly at times when the corporation seems to be experiencing declining sales or facing financial losses or even moving inexorably towards bankruptcy; how American management seems particularly adept at exercising stock options just before financial disaster occurs.

Nevertheless we should, perhaps, have pity on the modern predator. Agamemnon and Achilles had Homer to praise and sing of their efforts at predation. The capitalist and his entrepreneurial hireling have no laudatory poem, neither shorter nor as interminable as the *Iliad*. They can only be assuaged with an economic theory that thinks there is something scientific about the capitalist economic system.

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On making human development more humane

Making human
development
more humane

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Abstract It is widely recognised that the human development index (HDI) does not totally capture the rich content of the human development concept, necessitating a more adequate measure of human development. This paper introduces an ethics-augmented human development index (E-HDI) as a new indicator of socio-economic change and development. The E-HDI incorporates freedom, faith, environmental concerns and the institution of family in the HDI and ranks countries of the world accordingly. It is envisaged to be of practical use in national policy making and may also be related to agenda of the bilateral and international development agencies. Just as the HDI has managed to shift discussions beyond gross national product, the E-HDI is expected to inject ethical concerns more explicitly into policy making in the contexts in which the human development reports are used.

Introduction

There has been a profound transition in the perception of development – from the pre-1970s emphasis on economic growth to later concerns with income distribution[1]. Though economic growth remains unarguably an important aspect of development, there is now a realisation that growth is not always synonymous with development[2]. Consequently, a new view of development has emerged, which Todaro (1997, p. 16) aptly puts in the following words:

Development must therefore be conceived of as a multidimensional process involving major changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of poverty. Development, in its essence, must represent the whole gamut of change by which an entire social system, tuned to the diverse basic needs and desires of individuals and social groups within that system, moves away from a condition of life widely perceived as unsatisfactory toward a situation or condition of life regarded as materially and spiritually better.

A few early studies incorporated social indicators as alternative measures of development[3], but were by and large criticised as they sought to measure development in terms of structural change rather than as human welfare, and for an implicit assumption that developing countries must develop along the same lines of the developed countries. It is quite recent that the United Nations Development Programme (UNDP) developed a widely accepted measure of human development, the human development index (HDI). It is based on measures of income, education and health, and is thus unambiguously an improvement over the previous measure based on economic growth. However, it is a summary, not a comprehensive measure of human development, and the search for a better approach continues[4]. This paper

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attempts to improve the HDI by incorporating factors like freedom, faith and family values. It refers to Islamic ethics and its relevance to human development. Maqasid al-Shariah (literally meaning, the objectives of Shariah) forms a basis of our analysis. Not surprisingly, this brings some important changes in ranking of the countries of the world on a scale of human development. A focus of the paper is to find out if the Islamic concept of development is rooted in the contemporary Muslim world.

The next section reviews the literature on ethics and development with a particular reference to Islamic ethics and its relevance to development. It is followed by a discussion on methodology of the study, data analysis and findings. The final section presents a summary, conclusions and recommendations for further research.

Islam, ethics and development

Ethical values play certain developmental roles. For example, the notion of equality has implications for poverty eradication; liberty and freedom promote welfare, integrity and dignity, and reduce dependence; justice ensures equal opportunities to all; and environmental concerns protect nature, preserve life and promote sustainable development[5].

The concept of human development is hardly new in Islamic literature. The idea of bettering human life as the real end of all human activities was a recurring theme in the writings of most of the early Muslim philosophers like Ibn Khaldun and Ghazali. The Islamic holistic concept of development adopts a more inclusive approach to life than merely focusing on its material aspects. Islam views life as an organic whole in which the temporal and the eternal, material and spiritual behaviour are not separated from each other but treated as aspects of the same human behaviour. Development in Islam involves the optimisation of human well being in all these aspects. The concept of well being in Islam can be captured and discussed within the framework of Maqasid al-Shariah, defined by Ghazali (d.505/111) as follows:

The objective of the Shariah is to promote the well-being of all mankind, which lies in safeguarding their faith, their human self, their intellect, their posterity and their wealth. Whatever ensures the safeguard of these five serves public interest and is desirable (Chapra, 2000, p. 18).

In keeping with the goal of an Islamic society to strive for the ideal, the enrichment of faith, self, intellect, posterity and wealth becomes the focus of an Islamic development process. These goals cover the physical as well as the moral, psychological and intellectual needs of present and future generations. Thus, the recent emergence of a consensus on the holistic nature of development, embracing market and non-market, physical and non-physical, material and non-material elements draws ever closer to the Islamic multidimensional approach. Indeed, there seems to be developing a convergence of thoughts between the multidimensional Islamic concept of development and contemporary development economics[6].

In the light of the Maqasid al-Shariah, we propose four more dimensions to the three-pronged HDI, namely, environmental degradation, civil and political liberties, family values and religious influence. The proposed indicators are universally valued functions as well as developmental outcomes. Structurally, the proposed index, which we call an ethics-augmented human development index (E-HDI), consists of three fundamental human capabilities: living a long and healthy life, knowledge acquisition

through education, and having a decent standard of living. This is the irreducible core of human development, which the E-HDI divides it into two categories: the materialistic relating to satisfaction of human needs as reflected in the HDI's quantitative measures of income, education and health; and the qualitative influence of religion, family values, participation, democracy, freedom and environmental concerns. The following section discusses some methodological issues.

Methodology

We propose to include the following indicators in the construction of the E-HDI:

- life expectancy index;
- education index;
- GDP index;
- carbon dioxide emissions;
- freedom index;
- family value index; and
- faith index.

Ideally, preservation of life should include not only life expectancy, but also other variables like absence of fear, war, insecurity, unemployment, pollution, mental illness crime, availability of medical facilities, and clean water, etc. Similarly, preservation of intellect should be reflected not only by the education level, but also some other indicators of intellectual stimulation like reading habits, etc. In the same vein, wealth, posterity and faith are much broader concepts than what can possibly be captured by the indices mentioned. Data limitations, however, become binding making this study dependent on less than ideal variables.

We are forced to exclude a gender empowerment indicator for which no reliable data are available. In the absence of data on the Gini index for 57 countries, 22 of which being the OIC member countries[7], we are unable to adjust the GDP index for inequality. In the absence of sufficient data on divorce rate and the singulate mean age at marriage[8], fertility rate (births per woman) should serve as proxy for family value. While not being exactly the most appropriate measure, it gives some form of an indication of family value – the premise being, the higher a society's fertility rate the more the importance of family value in that society.

Data on freedom score are also missing for some countries for which we use estimates of freedom score of a country with similar civil and political condition as proxy (see details in Dar and Otiti, 2002).

In total, 46 of the 173 countries have had to be excluded for non-availability of data in one or more of the seven considered indicators. In other words, the E-HDI is based on 127 countries including 52 OIC countries.

Calculating the life expectancy and education indices

The indices of life expectancy and education as calculated in the *HDR 2002* (UNDP, 2002) are adopted. To calculate these dimension indices, minimum and maximum values are chosen for each underlying indicator. Performance in each dimension is expressed as a value between 0 and 1 by applying the following formula:

$$\text{Dimension index} = \frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}}.$$

The life expectancy index measures the relative achievement of a country in life expectancy while the education index measures a country's relative achievement in both adult literacy and combined primary, secondary and tertiary gross enrolment. For the education index, one index for adult literacy and another for combined gross enrolment are calculated. Then these two indices are combined to create the education index, with two-thirds weight given to adult literacy and one-third weight to combined gross enrolment.

The GDP index is also adopted from the *HDR 2002* (UNDP, 2002). It is calculated using adjusted GDP per capita (PPP US\$), with income serving as a surrogate for all the dimensions of human development not reflected in long and healthy life and knowledge. Income is adjusted because achieving a respectable level of human development does not require unlimited income.

The data on carbon dioxide emissions per capita are culled from the *HDR 2002* (UNDP, 2002). This is a negative measure: the higher the value, the worse the environmental degradation for a given country.

The freedom index is adopted from the *AHDR 2002* (UNDP, 2002). Maximum and minimum potentials for each country are standardised, and each country's achievement on the freedom score is normalised on a scale of 0 to 1, expressing absence of freedom and complete enjoyment of freedom, respectively.

As discussed above, this study considers the fertility rate as a proxy indicator of family value. For the sake of consistency with the method adopted by the HDI, these values are normalised on a scale of 0 and 1. The index is calculated for each country based on the following formula:

$$\text{Family value index} = \frac{\text{Actual fertility rate} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}}.$$

High family value is expressed as 1, while the other end of the spectrum is low family value expressed as 0.

The religious influence on a country is gauged using a simple scoring system. The influence of religion on each of the following three factors are scored on a scale of 0 to 4:

- (1) *Visibility of religion(s)*. Visibility of a religion or religions in the country; dominance of a religion that influenced the creation of the country and forms the *raisons d'être* of the country.
- (2) *Legal system*. Influence of religion in the judiciary – the civil, criminal and high courts.
- (3) *Government*. Influence of religion in government; presence of religiously motivated political parties and/or pressure groups and the influence of religion in the country's constitution.

The minimum possible combined score for a country is 0 while the maximum possible is 12. A simple average is found for each country's total score, which places its final score between 0 and 4. Interpretation of scores is shown in Table I.

The seven indicators are composed into the E-HDI using a flexible yet robust method, called the Borda rule[9]. This rule provides a method of rank-order scoring, awarding each alternative (countries in this case) a point equal to its rank in each criterion of ranking (listed above). We then add each alternative's scores to obtain its aggregate score and ranking. This produces a complete ordering of alternatives on the indicators used and, hence, is a valid social welfare function.

Rankings

The constructed E-HDI is reported in Table II[10]. The first column presents the ranking of countries on the basis of the E-HDI while the next column lists the countries on the basis of their HDI rank. The remaining seven columns present country listing on the basis of their ranks in each of the seven constituents of the E-HDI.

Sweden comes first by the E-HDI rank (as against Norway in the HDI rank), followed closely by Canada, Ireland and Austria. A large proportion of countries ranked in the first quartile of the E-HDI, rank and score highly in the freedom scores[11], the life expectancy index, education index and gross domestic product (GDP) index, but are penalised for high carbon dioxide emission per capita and low fertility rate. This observation holds true in the HDI rank as well[12].

A number of countries witness an improved rank in the E-HDI compared to their HDI rank. For instance, Portugal, Malta and Morocco rank 23, 24 and 30 on the HDI, respectively, as compared to their respective ranks of 11, 7 and 19 in the E-HDI rank. On the other hand, others witness a marked deterioration in rank from the HDI to the E-HDI. Japan, for example, deteriorates in rank from 7 in the HDI to 31 in the E-HDI. This is attributable to its low ranking in the carbon dioxide emission, family value index and the faith index.

Another case in point is the UK, which ranks 11 in the HDI with a deterioration in rank to 20 in the E-HDI. It is observed that the UK, though highly ranked in the life expectancy, education and GDP indices, is penalised for its high carbon dioxide emission of 9.2 metric tons per capita, its low family value index (derived from its low fertility rate of 1.6 births per woman) and its comparatively low faith index of 1.17. Similarly, The Netherlands, which ranks 6 in the HDI, ranks 28 in the E-HDI, penalised for its high carbon dioxide emission of 10.5 metric ton per capita, low fertility rate of 1.5 births per woman, and very low faith index of 0.63.

Incidentally, the countries ranked at the low rung in the HDI rank, also rank quite low in the E-HDI. These include Gambia, Côte d'Ivoire, Sierra Leone, Guinea Bissau, Burkina Faso and Chad. China ranks 126 (i.e. last but one) in the E-HDI, as opposed to 71 in the HDI. This marked deterioration in rank is traceable to its poor rank in the faith index. In fact, it ranks last in this index as the Chinese population is officially atheist. Also, China's freedom score is quite low ranking 122 on the freedom score rank.

Scores	Religious influence
Between 0 and 1	Low – secular state
Between 1+ and 3	Moderate
Between 3+ and 4	High

Table I.
Influence of religion

Table II.
Constituents of E-HDI

Countries	E-HDI rank	HDI rank	Life expectancy index rank	Education index rank	GDP index rank	Carbon dioxide emission per capita (metric tons) rank	Freedom scores, (1998) rank	Family value index rank	Faith index rank
Sweden	1	2	2	1	12	87	1	116	37
Canada	2	3	3	7	5	117	1	104	37
Ireland	3	15	21	13	3	114	1	90	37
Austria	4	13	6	13	8	104	1	121	32
Denmark	5	12	24	7	5	112	1	102	37
Australia	6	4	3	1	8	120	1	97	59
Malta	7	24	13	38	23	83	1	97	37
Luxembourg	8	14	19	31	1	121	1	97	27
Norway	9	1	6	7	3	101	1	102	78
Italy	10	17	6	16	15	100	17	121	25
Portugal	11	23	28	16	23	87	1	108	37
France	12	10	6	11	12	96	17	97	66
Switzerland	13	9	3	16	5	89	1	115	78
Spain	14	18	6	11	19	95	17	125	37
Finland	15	8	13	1	12	113	1	104	66
Costa Rica	16	34	21	49	44	54	17	64	66
USA	17	5	19	7	2	122	1	94	78
New Zealand	17	16	13	1	19	104	1	90	95
Chile	18	30	28	31	38	79	57	64	27
Philippines	19	57	66	27	72	44	41	50	37
UK	20	11	13	1	15	111	17	104	78
Panama	21	41	30	49	54	64	41	73	37
Greece	22	19	6	22	28	107	32	121	37
Uruguay	24	32	30	22	40	61	17	76	111
Samoa (Western)	24	76	66	78	62	36	41	38	37
Poland	26	29	36	16	39	108	17	116	27
Maldives	26	61	83	31	69	51	100	21	5
The Netherlands	28	6	6	1	8	115	1	108	123
Sri Lanka	29	65	43	53	82	24	60	87	14

(continued)

Countries	E-HDI rank	HDI rank	Life expectancy index rank	Education index rank	GDP index rank	Carbon dioxide emission per capita (metric tons) rank	Freedom scores, (1998) rank	Family value index rank	Faith index rank
Cape Verde	29	75	58	78	62	22	17	50	78
Japan	31	7	1	20	8	110	17	116	94
Solomon Islands	32	91	75	92	101	24	17	25	37
Belize	33	42	30	49	60	59	17	56	98
Barbados	34	25	21	27	29	93	1	108	98
Jordan	35	74	53	72	72	65	73	37	9
Ecuador	36	68	58	45	84	65	41	62	37
Venezuela	37	49	39	60	54	98	41	64	37
Armenia	38	56	39	22	89	44	41	125	37
Brunei Darussalam	39	26	24	49	23	118	89	71	23
Paraguay	39	66	58	60	69	40	70	73	27
Cyprus	41	21	13	38	18	103	56	94	78
Colombia	42	48	48	53	49	59	60	69	66
Mexico	43	39	43	53	40	78	60	71	59
Algeria	43	80	66	91	61	76	100	3	9
Dominican Republic	45	69	81	65	54	71	34	64	37
El Salvador	45	79	58	83	65	44	41	56	59
Fiji	47	52	71	31	65	40	70	53	78
Peru	47	60	71	45	62	47	77	69	37
Oman	49	58	48	94	33	109	90	19	19
Bahamas	50	33	66	38	23	94	17	76	98
Bolivia	51	85	91	65	90	56	32	42	37
Kuwait	52	35	24	83	29	124	77	64	14
Saudi Arabia	53	51	46	88	36	116	112	19	1
Mauritius	54	47	48	73	37	56	17	94	95
United Arab Emirates	55	36	30	83	21	126	100	56	7
Comoros	55	101	93	109	105	2	77	28	9
Korea, Rep. of	57	22	30	15	23	104	34	108	111

(continued)

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Table II.

Table II.

Countries	E-HDI rank	HDI rank	Life expectancy index rank	Education index rank	GDP index rank	Carbon dioxide emission per capita (metric tons) rank	Freedom scores, (1998) rank	Family value index rank	Faith index rank
Argentina	58	27	36	22	34	77	58	73	126
Hungary	58	28	48	20	34	92	17	121	95
Qatar	58	38	66	70	21	127	77	48	17
Bahrain	61	31	36	53	29	125	77	76	35
Thailand	62	50	58	53	49	73	41	90	66
Turkey	63	62	58	73	47	73	73	76	35
Nepal	63	106	96	110	110	2	60	32	24
Pakistan	65	102	93	113	99	32	73	26	5
Nicaragua	66	89	75	95	90	32	41	44	66
Malaysia	67	43	43	65	40	89	86	56	66
Libyan Arab Jamahiriya	68	46	53	53	45	99	123	48	22
Trinidad and Tobago	69	37	30	53	40	118	17	108	78
Tajikistan	70	84	77	38	112	36	91	56	37
Guyana	71	78	90	38	72	63	34	76	78
Romania	72	45	58	38	49	79	34	116	78
Iran, Islamic Rep. of	73	73	71	78	54	81	107	62	1
Bulgaria	74	44	53	31	54	89	41	125	66
Morocco	75	92	77	105	79	51	77	53	17
Tunisia	76	72	58	86	49	68	100	87	13
Syrian Arab Republic	77	81	48	88	79	75	123	45	3
Djibouti	77	111	121	105	90	30	86	15	16
Malawi	77	121	124	95	126	2	41	9	66
Bangladesh	80	108	95	114	105	15	55	47	32
Sudan	81	103	98	105	100	2	123	33	4
Brazil	82	53	77	60	45	61	60	85	78
Honduras	82	87	86	90	90	36	41	45	78

(continued)

Countries	E-HDI rank	HDI rank	Life expectancy index rank	Education index rank	GDP index rank	Carbon dioxide emission per capita (metric tons) rank	Freedom scores, (1998) rank	Family value index rank	Faith index rank
Kenya	84	98	107	86	114	22	41	38	59
Lebanon	85	55	39	60	69	84	100	85	32
Swaziland	86	94	117	73	65	24	34	35	122
Uzbekistan	87	70	71	27	90	82	91	76	37
Senegal	88	115	100	121	107	24	72	26	26
Albania	89	67	39	65	82	28	110	76	78
Turkmenistan	90	63	83	22	72	97	91	50	66
India	91	93	89	104	90	47	41	53	59
Mauritania	92	113	104	114	101	47	100	11	9
Equatorial Guinea	93	83	107	73	29	30	123	13	111
Egypt	94	86	81	98	79	58	107	56	8
Singapore	95	20	13	45	15	123	86	108	98
Yemen	95	107	92	110	117	36	112	2	19
Indonesia	97	82	83	70	85	47	91	76	37
Haiti	97	109	101	105	107	2	73	41	59
Azerbaijan	99	64	46	38	86	84	91	108	37
Kyrgyzstan	99	77	77	45	87	55	91	76	59
Guatemala	99	90	87	98	72	40	60	36	98
Nigeria	102	110	104	103	117	32	91	21	27
Surinam	103	54	53	31	72	86	60	87	111
Benin	103	117	99	114	115	116	34	17	119
Botswana	105	95	124	78	47	68	34	42	111
Gabon	106	88	101	77	49	68	114	21	78
Ghana	107	97	97	98	97	15	58	38	111
Mozambique	108	125	126	121	120	2	77	13	119
Cuba	109	40	24	31	65	67	123	104	109
Zambia	109	114	123	92	123	15	77	17	78
Kazakhstan	111	59	87	27	54	101	91	90	78
Zimbabwe	112	96	121	64	87	51	77	33	98

(continued)

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Table II.

Table II.

Countries	E-HDI rank	HDI rank	Life expectancy index rank	Education index rank	GDP index rank	Carbon dioxide emission per capita (metric tons) rank	Freedom scores, (1998) rank	Family value index rank	Faith index rank
Guinea	113	118	110	121	97	2	114	15	66
Uganda	114	112	117	101	111	2	110	5	98
Niger	115	126	114	127	123	2	114	1	66
Cameroon	116	99	109	95	101	2	114	30	98
Central African Republic	116	122	117	117	112	2	60	29	111
Congo	118	100	104	82	122	32	114	7	110
Chad	119	123	113	117	120	1	114	9	98
Togo	120	105	103	102	107	15	100	21	124
Burkina Faso	121	125	112	126	115	2	60	6	98
Guinea-Bissau	122	124	116	120	123	15	69	11	124
Angola	123	120	117	124	96	15	107	3	119
Sierra Leone	124	127	127	125	127	2	114	8	98
Côte d'Ivoire	125	116	110	112	101	40	91	31	118
China	126	71	53	65	72	71	122	97	127
Gambia	127	119	114	119	117	15	114	116	19

It is useful to get a feel for the relationship between the HDI rank, the E-HDI rank and rankings based on each of its seven constituents. In order to examine their underlying statistical relationship, we look at rank correlation coefficients, which are presented in Table III.

The OIC member countries

Table IV ranks the OIC countries on the E-HDI scale: Maldives tops the list by the E-HDI rank, followed by Jordan, Brunei Darussalam, Algeria and Oman, while Kuwait and Saudi Arabia were 6 and 7 on the list, respectively. Going by the HDI, Brunei-Darussalam, Bahrain, Kuwait, United Arab Emirates and Qatar rank 1 to 5, respectively. Saudi Arabia and Brunei Darussalam do not witness a significant change between the HDI and E-HDI ranks. This is not the case for other countries whose ranks either improve or worsen from the HDI to the E-HDI. For instance, Maldives, which tops the list by the E-HDI rank, is 13 by the HDI rank. Similarly, Jordan, which is second on the E-HDI rank, is 21 on the HDI rank. For both countries, this improved ranking in the E-HDI is attributable not only to their high ranks in the life expectancy, education and GDP indices, but also to their equally high ranks in the family index and low carbon dioxide emission per capita.

Algeria's position in the E-HDI of 4 as against its HDI position of 24 is traceable to its high family index (given a very high fertility rate of 7.2 per woman). Comoros' rank improves from an HDI rank of 32 to an E-HDI rank of 8 (which incidentally ties with United Arab Emirates). We observe here that though Comoros has an average ranking in the life expectancy, education and GDP indices, its bare minimum carbon dioxide emission of 0.1 metric tons per capita and its high fertility rate of five births per woman places it in an improved ranking in the E-HDI. Similarly, Pakistan's improved rank in the E-HDI of 13 (as against its HDI rank of 33) is traceable to its low carbon dioxide emission (0.7 metric tons per capita), high faith index (2.5) and high fertility rate (5.1 births per woman).

On the contrary, other countries witnessing a worsening in rank from the HDI to the E-HDI include Bahrain, Qatar and United Arab Emirates with HDI ranks of 2, 5 and 4, worsening to E-HDI ranks of 11, 10 and 8, respectively. In spite of these countries' high ranks in the life expectancy, education and GDP indices, they are penalised for extremely high carbon dioxide emission. The three countries' low freedom scores, average performance in the family value index (2.3 to 3.3 births per woman) and in the faith index depress their rankings in the E-HDI.

Libya, Malaysia, Lebanon and Azerbaijan suffer the same fate, i.e. deterioration in their HDI ranks of 7, 6, 10 and 16 to E-HDI ranks of 15, 14, 25 and 34, respectively. These countries are characterised by low freedom scores (Libya has zero freedom score), comparatively low faith index (all have less than 2) and low fertility rate (between 1.5 to 3.3 births per women).

Other countries maintaining just about the same rank in the HDI and E-HDI include Iran, Brunei Darussalam, Tunisia, Saudi Arabia and Turkey.

Gambia is at the bottom of the rung, with other last ten including Côte d'Ivoire, Sierra Leone, Guinea-Bissau, Burkina Faso, Togo, Chad, Cameroon, Niger and Uganda. Common characteristics of all of these countries are their low ranks in all but the family value index and carbon dioxide emission. These countries rank highly in the family

Table III.
Rank correlation matrix
of constituents of E-HDI

	E-HDI	HDI	Life expectancy index rank	Education index rank	GDP index rank	Carbon dioxide emission rank	Freedom score rank	Family index rank
HDI	0.7841							
Life expectancy index rank	0.7878	0.9431						
Education index rank	0.6966	0.8981	0.7976					
GDP index rank	0.7281	0.9335	0.8459	0.7721				
Carbon dioxide emission rank	−0.5485	−0.8392	−0.7800	−0.7059	−0.8423	−0.3976		
Freedom score rank	0.7183	0.5927	0.5475	0.5895	0.5466	0.6736	−0.5843	
Family index rank	−0.5736	−0.8415	−0.8220	−0.8377	−0.7294	0.6736	−0.1154	−0.0188
Faith index rank	0.3912	0.0938	0.1788	−0.0133	0.0783	−0.1608		

Notes: We observe a high positive relationship of 0.78 between the HDI and the E-HDI, and between the E-HDI and the core development constituents of life expectancy, education and GDP indices. There is also a high positive relationship between E-HDI and freedom score index. There are low, negative relationships between E-HDI and its other constituents of carbon dioxide emission and family index

Countries	E-HDI rank	HDI rank	Life expectancy index	Education index	GDP index	Carbon dioxide emission per capita (metric tons)	Freedom scores, 1998	Fertility rate (birth/woman)	Family value index	Faith index
Maldives	1	13	0.69	0.90	0.63	1.2	0.18	5.4	0.62	2.50
Jordan	2	21	0.76	0.78	0.61	2.2	0.48	4.3	0.46	2.75
Brunei	3	1	0.85	0.86	0.86	17.5	0.30	2.5	0.20	2.50
Darussalam	4	24	0.74	0.69	0.66	3.6	0.18	7.2	0.88	2.73
Algeria	5	11	0.77	0.67	0.82	8.5	0.25	5.5	0.64	2.12
Oman	6	3	0.85	0.74	0.84	27.2	0.35	2.7	0.23	1.82
Kuwait	7	8	0.78	0.71	0.79	14.1	0.05	5.5	0.64	1.53
Saudi Arabia										
United Arab Emirates	8	4	0.83	0.74	0.87	37.5	0.18	2.9	0.26	2.42
Comoros	8	32	0.58	0.49	0.46	0.1	0.35	5.0	0.57	2.08
Qatar	10	5	0.74	0.79	0.87	80.9	0.35	3.3	0.32	2.08
Bahrain	11	2	0.81	0.85	0.84	31.5	0.35	2.3	0.17	2.42
Turkey	12	14	0.75	0.77	0.71	3.2	0.48	2.3	0.17	1.25
Pakistan	13	33	0.58	0.42	0.49	0.7	0.48	5.1	0.58	1.50
Malaysia	14	6	0.79	0.80	0.75	5.7	0.33	2.9	0.26	2.33
Libyan Arab Jamahiriya	15	7	0.76	0.84	0.72	6.8	0.00	3.3	0.32	3.67
Tajikistan	16	27	0.71	0.88	0.41	0.8	0.20	2.9	0.26	1.77
Guyana	17	23	0.63	0.88	0.61	1.9	0.83	2.3	0.17	1.67
Iran, Islamic Rep. of	18	20	0.73	0.75	0.68	4.4	0.17	2.8	0.25	2.35
Morocco	19	30	0.71	0.50	0.60	1.2	0.35	3.0	0.28	2.42
Tunisia	20	19	0.75	0.72	0.69	2.4	0.18	2.1	0.14	2.12
Syrian Arab Republic	21	25	0.77	0.71	0.60	3.3	0.00	3.7	0.38	1.67
Djibouti	21	39	0.30	0.50	0.53	0.6	0.33	5.8	0.68	1.17
Bangladesh	23	37	0.57	0.40	0.46	0.2	0.80	3.6	0.36	0.83
Sudan	24	34	0.52	0.50	0.48	0.1	0.00	4.5	0.49	1.50

(continued)

Making human development more humane

Table IV.
The OIC member countries – E-HDI ranks

Table IV.

Countries	E-HDI rank	HDI rank	Life expectancy index	Education index	GDP index	Carbon dioxide emission per capita (metric tons)	Freedom scores, 1998	Fertility rate (birth/woman)	Family value index	Faith index
Lebanon	25	10	0.80	0.83	0.63	5.1	0.18	2.2	0.16	2.42
Uzbekistan	26	18	0.73	0.91	0.53	4.6	0.20	2.3	0.17	3.67
Senegal	27	42	0.47	0.37	0.45	0.4	0.50	5.1	0.58	1.25
Albania	28	17	0.80	0.80	0.59	0.5	0.10	2.3	0.17	1.17
Turkmenistan	29	15	0.69	0.92	0.61	6.5	0.20	3.2	0.30	1.95
Mauritania	30	41	0.44	0.40	0.47	1.1	0.18	6.0	0.71	1.17
Egypt	31	28	0.70	0.62	0.60	1.6	0.17	2.9	0.26	1.17
Yemen	32	36	0.59	0.48	0.37	0.8	0.05	7.6	0.94	1.75
Indonesia	33	26	0.69	0.79	0.57	1.1	0.20	2.3	0.17	1.50
Azerbaijan	34	16	0.78	0.88	0.56	5.1	0.20	1.5	0.06	1.50
Kyrgyzstan	34	22	0.71	0.87	0.55	1.4	0.20	2.3	0.17	2.17
Nigeria	36	38	0.44	0.58	0.37	0.7	0.20	5.4	0.62	0.75
Surinam	37	9	0.76	0.90	0.61	5.2	0.65	2.1	0.14	2.45
Benin	37	44	0.48	0.40	0.38	0.1	0.83	5.7	0.67	1.25
Gabon	39	29	0.46	0.76	0.69	2.4	0.03	5.4	0.62	1.25
Mozambique	40	50	0.24	0.37	0.36	0.1	0.65	5.9	0.70	0.92
Kazakhstan	41	12	0.66	0.91	0.68	7.6	0.20	2.0	0.13	1.53
Guinea	42	45	0.38	0.37	0.50	0.2	0.03	5.8	0.68	0.92
Uganda	43	40	0.32	0.60	0.42	0.1	0.10	7.1	0.87	0.75
Niger	44	51	0.34	0.16	0.34	0.1	0.03	8.0	1.00	0.82
Cameroon	45	31	0.42	0.65	0.47	0.1	0.03	4.7	0.52	2.43
Chad	46	47	0.35	0.39	0.36	0.0	0.03	6.3	0.75	0.92
Togo	47	35	0.45	0.59	0.45	0.2	0.18	5.4	0.62	1.42
Burkina Faso	48	49	0.36	0.23	0.38	0.1	0.35	6.8	0.83	0.58
Guinea-Bissau	49	48	0.33	0.38	0.34	0.2	0.64	6.0	0.71	0.92
Sierra Leone	50	52	0.23	0.33	0.27	0.1	0.03	6.5	0.78	2.08
Côte d'Ivoire	51	43	0.38	0.44	0.47	0.9	0.20	4.6	0.51	0.92
Gambia	52	46	0.35	0.39	0.47	0.2	0.03	4.8	0.54	0.58

value index given their very high fertility rate (amongst the highest in the world – between 4.5 to 8 births per woman) and have very minimal carbon dioxide emission.

A closer scrutiny of the OIC member countries' ranks in each of the four indicators used in augmenting the HDI (apart from HDI constituent indicators of life expectancy, education and GDP indices), would aid a further understanding of each country's position in the E-HDI rank:

- (1) Six OIC member countries record high levels of carbon dioxide emission. In fact, Qatar, United Arab Emirates, Bahrain and Kuwait rank the highest world wide in that order. Brunei Darussalam and Saudi Arabia also rank in the high echelon. On the other hand, other OIC member countries rank amongst the countries with the barest minimum carbon dioxide emission in the world, for example, Chad emits none and tops the world list in this indicator, Sierra Leone, Mozambique, Sudan, Cameroon, and Niger all barely emit any carbon dioxide. We also observe that almost all the OIC member countries with less than 1 carbon dioxide emission per metric ton have low HDI and E-HDI ranks and are mostly African countries with the exception of Albania and Comoros. Whereas, the OIC countries with the highest carbon dioxide emission (above 5 metric tons per capita) have comparatively higher HDI and E-HDI rank and are mostly Arab states (with the exception of Turkmenistan, Azerbaijan and Malaysia). Indeed the first five countries with the highest emissions are Arab states.
- (2) No OIC country has an index of 1 in the freedom score. In fact, only 10 countries of the 52 (19 per cent) have a freedom score index above 0.48. All the other 42 countries (81 per cent) have low freedom score index ranging from 0 to 0.35.
- (3) The OIC member countries include countries with the highest fertility rates in the world. Niger, Yemen, Algeria, Uganda, Burkina Faso, Sierra Leone and Chad top the world list in fertility rate in that order. Overall, 22 of the 52 countries have fertility rates of five to eight births per woman (42 per cent), 11 have fertility rates of three to five births per woman (21 per cent) and 18 countries have fertility rates of two to three births per woman (35 per cent). Only one country, Azerbaijan, has fertility below two births per woman.
- (4) Only two countries can be considered as highly religiously influenced – Saudi Arabia and Iran, both with a faith index of 3.67. Most of the other OIC member countries (39) fall under the “moderate religious influence” category. A total of 11 of them fall under the “low religious influence” category. These are: Guinea Bissau, Togo, Mozambique, Benin, Côte d'Ivoire, Suriname, Sierra Leone, Chad, Cameroon, Uganda and Burkina Faso.

Summary, conclusions and recommendations

This study has explored the contours of a new approach that could lead to a better measurement of human development, an approach that factors-in the importance of ethics in development. An E-HDI was considered within the framework of the Maqasid al-Shariah, which is basically concerned with the promotion of human well being through the preservation of self, wealth, posterity intellect and faith.

Although the study set out to incorporate a number of ethics-based indicators in the index, data constraints compel the exclusion of some of the proposed indicators, namely, gender inequality, distribution inequality and to some extent family value. We

believe the inclusion of these would have made for a more useful and revealing index; nevertheless, the constructed E-HDI is a step in the right direction. Significant differences in the HDI and the E-HDI rankings suggest that the E-HDI is an improvement over the existing measures of human welfare. Particularly, countries with high carbon dioxide emission fall in rank, so also countries with low fertility rate and low freedom and faith indices.

The E-HDI reveals that most countries of the world are secular countries with religion or faith playing a minimal role in the affairs of the state. The OIC member countries are no exception, the majority of which are low to moderate religiously influenced countries.

Fertility rate correlates highly and negatively with the GDP index. The implication of this to human wellbeing is open to further discussion. As earlier discussed, the study would rather incorporate the divorce rate and the singulate mean age at first marriage as determinants of family value in a society.

The absence of civil and political liberties features very prominently amongst the OIC member countries. In a number of these countries, the absence of democracy based on participation, pluralism, separation between authorities, independence of the judiciary, and free and honest periodic elections have formed an obstacle to the development process. This is not to deny achievements attained in the social, economic, productive, political and cultural spheres. Nevertheless, giving the democracy low priority has not helped to reinforce the necessary participation and unity needed between civic and political circles in these countries.

A task for further research would be to improve the quality of the existing data to make them internationally comparable, and to stimulate gathering of the relevant statistics. We have, for instance, used carbon dioxide emission in this study as a measure of environmental degradation, but that is not the only measure of environmental degradation. Deforestation, desertification, soil erosion, salination, silting and depletion of water supplies are other forms of environmental degradation on which adequate data do not exist.

If the objective of constructing an E-HDI is to measure the level of human choices or assess opportunities, then it is desirable to incorporate measures of distributional inequality not only in the income index but also in the other two core development dimensions of life expectancy and education indices. Inequality is an issue not just in income where it is arguably most severe but also in education and health, where inequalities are perhaps seen as more troubling.

This study has not relied on the cardinal magnitude of the data but has opted for an ordinal measure using an ordinal aggregator – the Borda Rule; hence it will be observed, that the study present only E-HDI ranking of countries. A further step is to actually calculate an E-HDI for each country. This will make more sense, when data are available, reliable and comparable. In that case, it will also make sense and be possible to delineate categories for each dimension, i.e. what constitute high, medium or low values for each dimension. In that instance, not only will country ranking relative to others be available, but also country's absolute index on the E-HDI.

Another area for further research is the exploration of the precise meaning of some of these indicators. For instance, the family value indicator we are constrained to use in this study (i.e. fertility rate) is admittedly imperfect as a universally valid proxy for family value. Similarly, for environmental concerns, it may apply in different ways for

the rich and poor countries, as for the former it arises from wealth and for the latter from poverty. While the advanced countries may degrade the environment by ever-higher resource-intensive production, the poor country's demand for food and fuel for rapidly growing and poor populations leads to deforestation, desertification, soil erosion, salination, silting and depletion of water supplies. This leaves a dilemma of which measure of environmental degradation to include in the E-HDI, encompassing different forms of environmental degradation in the rich and poor countries. The measures for faith and family values present no less a dilemma.

Notes

1. See, for instance, Weaver and Jameson (1977) and Griffin (1977).
2. See, for example, Streeten (1981), Grant (1978), Morris (1979) and Streeten *et al.* (1981).
3. Adelman and Morris (1967) seek to measure development in terms of a pattern of interaction among social, economic, and political factors. UNRISD (1970) constructs a composite social development index based on a selection of development indicators and an analysis of relationships between these indicators at different levels of development. Camp and Spiedel (1987) construct a single index of "living conditions", the International Human Suffering Index, comprising ten measures of human welfare including income, infant mortality, nutrition, adult literacy and personal freedom.
4. For criticisms of the HDI, see Streeten (2000), *AHDR 2002* (UNDP, 2002), Dasgupta (1995) and Hicks (1997).
5. For detailed discussion on ethics and development, see Goulet (1995).
6. For detailed accounts of Islamic and contemporary development economics approaches, see Ahmad (1980, 2000), Sen (1999), Chapra (1993, 2000) and UNDP (1990-2002).
7. The member states of the Organisation of Islamic Conference.
8. There are no data on the divorce rate for 85 countries (inclusive of 20 OIC member countries), similarly there is a dearth of data on the singulate mean age at marriage (female and male) for 79 (inclusive of 21 OIC members) and 85 (inclusive of 28 OIC members) countries, respectively.
9. A technique for which there is precedence; see *AHDR 2002* (UNDP, 2002).
10. Given that only 127 countries are considered in the construction of the E-HDI as against the 173 ranked by the HDI, each country's rank on the HDI had to be reshuffled accordingly but in the same progression relative to others. In other words, the HDI rank of an individual country in this study does not have to tally with its rank in the *HDR*. For both the HDI and the E-HDI rank, a higher value in rank represents a worse human development position.
11. With the notable exception of the Maldives, which has a low freedom score index of 0.18.
12. Except for Singapore, Brunei Darussalam and Bahrain, with low freedom scores of 0.33, 0.30 and 0.35 respectively (see, for details, Dar and Oti, 2002).

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Political implications of cultural evolution

Implications of
cultural
evolution

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Keywords Culture, Social change, Freedom, Law

Abstract *In the course of cultural evolution, certain institutions have emerged and become dominant in the Western world that have led to an unprecedented rise in prosperity and population. This paper first explains the characteristics and significance of cultural evolution. Subsequently, it explains the fundamental role of politics and the scope for political action in cultural evolution, clearing up some fairly widespread misconceptions about this question. Finally, it derives three specific guidelines from the characteristics of cultural evolution that should be followed in politics. First, the principle of individual freedom should be realized as far as possible. Second, the rule of law should be secured. Third, the scope of action of the state should be closely limited and the state should be decentrally organized. The more consistently these guidelines are followed, the better the prospects of the respective society to survive and prosper in the competitive process of cultural evolution.*

1. Characteristics and significance of cultural evolution

Until some 250 years ago, 90 percent of humankind lived in desperate poverty. For centuries, their standard of living persisted at extremely low levels. Population figures also stayed low for centuries. For example, the total population of Western Europe was only about 25 million in the year 1000 – not more than at the time of Christ's birth. A significant and lasting improvement came about only in the wake of the Industrial Revolution, which started in Great Britain in the mid-eighteenth century and soon spread to the Western European continent and North America[1]. These countries saw a rapid, unprecedented rise in prosperity and population. In Western Europe, for instance, real per capita gross domestic product (GDP) rose 19-fold from 1700 to 2001, while the population expanded to 392 million by 2001 (Maddison, 2003, pp. 256, 262).

The Industrial Revolution and the growing prosperity and expanding population in the Western world since this Revolution were the outcome of the far-reaching establishment of certain institutions: the principle of individual freedom (especially the freedoms of contract, trade and commerce), the predominance and effective protection of private property by the state (also and especially of the means of production), and the rule of law. Taxes were low, and the state largely refrained from putting shackles on the economy by imposing regulations. Feudalism, the guild system and mercantilism were finally overcome. Free private enterprise gained the upper hand in economic life. Markets were open, and hence competition was fierce. For the first time in history, people had a wide scope of freedom to engage in independent and productive economic activity, while at the same time this economic activity was efficiently coordinated.

The institutions that were decisive for the Industrial Revolution and the following rise of the Western world had developed before in the course of cultural evolution in a gradual and unplanned manner[2]. Even though people were consciously changing these institutions all the time, all of the changes – conscious and unconscious – had to



survive the competitive process of cultural evolution under unpredictable, constantly changing conditions. For instance, no one could predict which specific legal norms would eventually prevail, not even those who had consciously invented and introduced such norms. As a matter of fact, those who introduced the abovementioned institutions mostly did not foresee their welfare-enhancing effects. For example, individual freedom and the rule of law emerged in seventeenth-century England only as a by-product of the struggle for power between the king and parliament – a struggle which was decided in the Glorious Revolution of 1688 in favor of parliament and thus in favor of the aforementioned institutions (Hume, 1983-1985; Macaulay, 1979).

The Western societies that developed more productive institutions (by whichever way), prospered and expanded (Reinhard, 1983-1990). In the course of this process, they attracted people from other societies and tended to displace these societies unless these other societies adopted the more productive institutions. Societies that clung to less productive institutions or introduced such institutions fell behind in the competitive process of cultural evolution. They were threatened by decline and some even by extinction. Examples include the native Indian societies of North America, the Aztec empire in Central America and the Inca empire in South America. A further example is imperial China, which had been technologically ahead of Western Europe until the fifteenth century. But the centralist, totalitarian and repressive arbitrary rule of the emperor and his all-powerful mandarins, who, out of fear of losing their power, banned private property, individual freedom, private enterprise and open markets and suppressed all individual initiatives, inevitably led to economic regression and cultural decline (Landes, 1998, pp. 55-7; Weede, 2000, pp. 86-108). A recent example is the socialist countries of the twentieth century. In these countries, the communist rulers abolished all institutions that had spontaneously evolved in the course of cultural evolution and had enabled the rise of the Western world, replacing them by newly constructed institutions. For example, a system of central planning and control of all economic processes replaced the free market, and private ownership of the means of production was replaced by state ownership. Each of the institutions that the communists created as a replacement for the ones they abolished had a number of serious functional deficiencies and thus contributed to the final collapse of socialism (Feldmann, 1997).

From a historical perspective, the collapse of the socialist regimes of the twentieth century came about rather swiftly – indicating that social systems today are under very strong selection pressure. In this context, the much lower transaction and transport costs that have decreased substantially in the course of the nineteenth and twentieth centuries, and the higher mobility of people and capital play a crucial role. Nowadays, in virtually all parts of the world, people are able to inform themselves at comparatively low costs about the conditions prevailing in other countries, e.g. about the standard of living or about the extent to which individual liberties are realized in these countries. Furthermore, today more than ever before, both people and capital tend to migrate much faster and to a larger extent to where they can earn higher income. Less competitive societies inevitably fall behind more and more. Therefore, the (opportunity) costs of a policy that fails to adequately address the competitiveness of society are probably higher today than ever before in the history of humankind.

What are the lessons for politics to be learned from these characteristics of cultural evolution? What guidelines should be followed to ensure that the society concerned

survives in the competitive process of cultural evolution? Before we can answer these questions, we must clear up two widespread misconceptions about the role of politics and the scope for political action in the process of cultural evolution (section 2). Subsequently, we will derive three specific guidelines from the characteristics of cultural evolution that should be followed in politics (section 3).

2. Between Panglossism and constructivism

2.1 *The risk of Panglossism*

In Voltaire's 1759 novel *Candide*, the reputed court tutor Master Pangloss claims that we live in the best of all possible worlds: "It is proved", he used to say, "that things cannot be other than they are, for since everything is made for a purpose, it follows that everything is made for the best purpose" (Voltaire, 1947, p. 20). Thus, the notion that we live in the best of all possible worlds, considering all the problems and obstacles that impede conceivable improvements, is referred to as Panglossism today. Critics of a worldview based on cultural evolution contend that this worldview implies such an uncritical Panglossism. According to these critics, from the perspective of cultural evolution everything that survives in the course of cultural evolution is superior. By surviving, it proves its superiority. Thus, the critics claim that the theory lacks an independent benchmark for measuring the results of cultural evolution and for assessing political reform proposals. Neither would the theory allow the deduction of political reform proposals. According to the critics, the advocates of the theory implicitly conclude that "what is" "should be", thus committing a naturalistic fallacy. Consequently, it would be consistent with this worldview to accept even totalitarian regimes that evolved in the course of cultural evolution. The theory of cultural evolution is criticized as fatalistic[3].

In fact, there is no such risk of Panglossism. The advocates of the theory of cultural evolution have not fallen prey to a naturalistic fallacy. They do not claim that the results of cultural evolution are necessarily "good", but rather that humankind cannot continue to exist with today's size and prosperity without the specific institutions mentioned above and their further evolution. If these institutions were to be destroyed, a large part of humankind would be doomed to poverty and famine. Although the benefits of these institutions do not "justify" them, the alternative for many people would be poverty and death (Hayek, 1988, pp. 27, 63).

If one accepts the preservation of humanity and its prosperity as a normative standard, it is very well possible to deduce concrete political recommendations from the theory of cultural evolution. Political reforms are not only possible but necessary because the evolution of institutions time and again is being disrupted by diverse factors, even though these institutions are basically selected in the process of cultural evolution for their contribution to people's survival and prosperity. For instance, many traditional institutions continue to exist even after they are no longer useful and have become more of an obstacle than help, e.g. if they cannot cope with new problems. Moreover, certain institutions, such as the further development of law through the judiciary, may sometimes take a counterproductive turn, making a correction necessary by passing the appropriate legislation. As history has shown, cultural evolution can even lead entire societies into dead-end streets from which they have a hard time getting out.

In addition, it is sometimes necessary to specifically improve on traditional institutions in order to tap their full potential. For example, the institution of private property as it exists today is far from perfect. Ownership of property involves a complex bundle of rights that can take on many different forms and may be allocated to various persons or groups of persons (Feldmann, 1999, pp. 54-80). The various possibilities of defining and allocating property rights have by no means been exhausted yet (for example, in the area of financial instruments or scientific discoveries and inventions). Lawmakers must create the foundation to enable the exploitation of all of these possibilities.

A powerful state is another factor that time and again has disrupted cultural evolution. Powerful governments tend to abuse their power by oppressing their citizens and by attempting to stop or control the process of cultural evolution. The Chinese empire and the socialist regimes of the twentieth century are examples of this. Even today's representative democracies pose a threat to the traditional institutions of rule of law and market economy. Since the power of politicians in today's democracies is not sufficiently limited and since they depend on the support of organized interest groups, interventions in favor of such interest groups occur repeatedly – interventions that violate the principles of rule of law and market economy, thus endangering the order of free society in the West (Olson, 1965, 1982; Zakaria, 2003). The notion of "social justice" also threatens the functioning of this social order today, because very often it is used as the grounds for interventions that contradict the principles of a free society (Hayek, 1976). Therefore, constitutional safeguards are necessary to prevent governments as far as possible from abusing their power and interest groups from wielding harmful influences.

Another disruptive factor for cultural evolution are innate human instincts, which must be kept in check by adequate political measures. For millions of years, humans and their hominid ancestors lived in small hordes in which every group member knew all the others personally. Life in such groups, which were headed by a leader, was characterized by concrete common goals and a similar perception of the environment, an environment recognized by all members chiefly as a potential source of food and danger. Cooperation within the group was narrowly circumscribed. It was during this period that certain instincts evolved and became genetically fixed that guided the behavior of human beings. These instincts were adapted to life in small groups and served to ensure the cohesion and continued existence of the group. Important examples include the instincts of solidarity, altruism and income equality. They did not apply to all human beings but only to the members of the group. In the course of cultural evolution, learnt rules of conduct emerged to increasingly override and replace primordial instincts (Hayek, 1983, 1988). Only this enabled the development of an extended social order. From time to time, however, the suppressed instincts revolt against the discipline of learnt rules of conduct, e.g. against loyalty to agreements or against respect for other people's freedom and property. A good example for this phenomenon are the communist doctrines. They condemned these rules and instead appealed to the primordial instincts of solidarity, altruism and income equality. The revolt of suppressed instincts poses the risk of people falling back on the notions of tribal society, threatening the existence of the extended social order to which they owe not only their prosperity, but even their lives (Hayek, 1976, 1979a).

2.2 *The risk of constructivism*

Unlike Panglossism, which only is an ostensible danger, constructivism (or constructivist rationalism) constitutes a real threat. The representatives of this school maintain that social institutions can serve human purposes only if they were deliberately designed for these purposes. Institutions that were not rationally designed could be beneficial only by accident (Descartes, 1996). At some point in the course of evolution, reason emerged, and ever since, people have become increasingly systematical in rationally creating social institutions. The advocates of constructivism believe that it is possible to reconstruct all institutions – including language, morals and law – and therefore the entire social order by reason. In their view, society and its institutions should be reformed in a way to best serve certain defined purposes.

Ever since the Enlightenment, this constructivist belief has been the predominant view, prevailing especially among intellectuals and politicians. Its purest form is found in the communist doctrines. In the twentieth century, communists attempted to build a completely new social order in many countries on the basis of rationally designed institutions and by abolishing all traditional institutions, which in their view only served to exploit the working class anyhow. Thus, they not only introduced central planning to replace the free market, and state ownership of the means of production to replace private property. In addition, the rule of law was replaced by socialist law that did not serve to guarantee individual liberties but to execute the directives of the governing communist party. Even the traditional moral values of Western civilization were to be replaced by a new, socialist morality. Socialism in the twentieth century was a gigantic attempt to design anew the whole of society down to its ultimate ramifications according to an all-encompassing theory. To this end, all major institutions that had evolved spontaneously in the past were abolished and replaced by new institutions constructed to serve specific purposes. This hubris is precisely why the socialist systems finally collapsed (Feldmann, 1997).

Even though constructivism in its pure form, as implemented in the countries of “real socialism”, failed miserably, it is still alive. Time and again human reason revolts against traditional rules of conduct whose purpose is not clearly understood. One example is legal positivism, which developed in the nineteenth century and is still influential today. This theory rejects traditional principles and rules of law that are not rationally explainable and limit the power of legislation. For legal positivism, law by definition consists exclusively of deliberate commands of a human will. Law should be drafted specifically to achieve certain purposes (Kelsen, 1925). According to legal positivism, the power of the legislator may not be subject to any restrictions, and consequently neither to any restrictions that protect individual liberties. Legal positivism not only helped to pave the way for communism and national socialism, it also substantially changed the conception of law in the Western world.

Constructivism is also furthered by the fact that nowadays an increasing number of people work at large organizations that were founded for specific purposes, such as large enterprises or state authorities. The success of the rules consciously created for these organizations was so impressive that people are understanding less and less how important organic evolution of rules and spontaneous order are. The comprehension of people working at such large organizations is basically confined to what is required by the internal structure of such organizations. The spontaneous order of actions of an

extended market society is largely incomprehensible to them. They have never practised the rules on which it rests. Its functioning and distributive effects seem irrational and immoral to them. Therefore, they demand that the entire social order and all of society's institutions should be constructed in the same way as a large organization, and that this should bring about a just distribution of income in particular.

However, contrary to the claims of constructivism, a social order and its institutions cannot be reconstructed from scratch. Cultural evolution as a whole cannot be controlled by reason. Reason itself only emerged in the course of cultural evolution. It did not control the process of cultural evolution but itself rather developed only gradually in the early phase of this process[4]. People did not adopt new rules of conduct because they were intelligent, but rather people grew intelligent by submitting to new rules of conduct. Humans did not invent their most beneficial institutions, ranging from language to morals and law and markets. They were not intelligent enough to do so.

Even today, people cannot fully grasp the significance and interdependence of the institutions that guide their behavior. Often, they do not know why the institutions initially emerged; why they proved to be superior compared to others; how they support the complex order of actions in a Great Society; why and how they change in the course of time; and in which way they depend on each other. Often, people are not even aware of the rules of conduct although they observe them. Even rigorous scientific research cannot completely reveal the emergence, functions, changes and interdependencies of the institutions of a Great Society. Neither is it possible to predict the future conditions to which the institutions will have to adapt. For all these reasons, cultural evolution cannot be steered or controlled. The fallacy of constructivists is their belief that they can gather all of this information to build a completely new social order. But as the example of the socialist regimes in the twentieth century has shown, such an attempt could threaten the prosperity that humankind has achieved, and even the physical existence of parts of today's world population, as traditional institutions would inevitably be destroyed that are indispensable for the preservation of today's prosperity and population.

This, of course, does not mean that traditional institutions cannot be improved. Yet, as we do not fully understand them, we should not readily abolish them. Rather, in the case of clear deficiencies, we should examine how a reform of one institution would probably improve the functioning of the whole institutional structure and foster the preservation of the complex order of human actions in a Great Society. Political reforms could be developed on the basis of such analyses.

3. Guidelines for politics

As explained in section 2, politics play an important role in cultural evolution. In the light of the strong selection pressure that prevails in cultural evolution today, politicians should adopt measures that help the society for which they are responsible to survive and prosper. Although the decision to adopt this objective does imply a value judgment that cannot be proven scientifically, all politics must be orientated towards specific goals that cannot be proven by scientific methods (Weber, 1988). What speaks for the objective stated above is the fact that its attainment is a

prerequisite for achieving practically all other goals that the members of a society may wish to achieve. Moreover, this objective is probably accepted by practically all people.

The characteristics of cultural evolution allow us to derive general guidelines for politics if one accepts the objective mentioned above. Following the guidelines set out below will make it easier to attain this objective. Moreover, the guidelines ensure consistency in politics and prevent inherent contradictions. This helps to avoid expensive frictions that would occur if general guidelines are ignored.

The guidelines set out below are of an abstract nature, as they only define certain aspects of politics. Thus, they allow a wide scope for the concrete definition of political institutions and the structuring and implementation of practical political measures. This scope may be used in a variety of ways from country to country according to their different histories, cultural values, traditions, external conditions and human preferences. The guidelines themselves are not arbitrary, though. They are a logical result derived from the characteristics of cultural evolution. If the existence of the respective society and its prosperity are to be safeguarded, the guidelines must be adhered to and implemented in concrete political measures and institutions. The more consistently this is done, the higher is the likelihood of achieving the objective. The less this is done, the higher is the risk not only for the prosperity, but also for the long-term existence of the society concerned.

3.1 Individual freedom

In the light of the characteristics of cultural evolution, the most important principle of politics must be the far-reaching realization of individual freedom. To the greatest extent possible, individuals must be allowed to live their lives according to their wishes. At the same time, each individual must, of course, bear the consequences of his actions (principle of accountability), as a free society cannot function without individual responsibility (Eucken, 1990, pp. 279-85). Moreover, an individual must not violate the freedom of other human beings in the pursuit of his goals (Mill, 1974, pp. 68-74, 119-20).

Individual freedom is a social condition in which coercion of some by others is reduced as much as is possible in society (Hayek, 1960, p. 11). People must not have the power to force their will on other human beings. For this reason, each individual must be assured of a private sphere in which others may not intrude. Above all, each individual must have the freedom to dispose of his own means. Only this enables him to pursue his own goals. This is why private property is a central element of individual freedom. It is an indispensable prerequisite for the exercise of individual freedom.

Freedom of contract is another part of individual freedom. Only if members of society are basically free to conclude contracts with others, can they actually practice their freedom in society. For example, an individual must in principle be free to conclude purchase contracts for goods he wishes to own.

Another expression of individual freedom is freedom of competition. Basically, all individuals must have the right to offer their goods, services, ideas and factors of production on the market unhindered and thus enter into competition with other suppliers. Markets must be open. This principle does not only apply to the economy, but also to politics, science, religion and other important areas of society. Not only must freedom of profession and trade be guaranteed, but also political elections must be free, and freedom of research and teaching, freedom of speech and the press, and religious

freedom must be guaranteed. Free competition must be assured, also in these areas of society.

The central significance of individual freedom in the process of cultural evolution consists of its prosperity-increasing effects. Every individual has the option and the incentive to use his means to reap the highest possible gains. As Adam Smith (1981, pp. 452-9) emphasized, individuals only have their personal advantage in mind and not the welfare of society as a whole when pursuing their goals, but competition guides them as if led by an invisible hand to contribute to the overall prosperity of society at the same time. The individual entrepreneur will be compelled to produce goods that meet consumers' preferences and apply production processes that guarantee the highest degree of cost efficiency. He also has the incentive to respond to changes in procurement prices and other data by flexibly adjusting production and to develop more efficient production methods or new and improved goods of his own accord. Individual employees have the incentive to work as productively as possible, too, because in this manner they can raise their personal income. Higher productivity leads to higher prosperity for all of society.

The prosperity-increasing effects of individual freedom are also due to the fact that every member of society has an incentive to apply his personal knowledge and skills. In this manner, the knowledge of all people is used to the benefit of the entire society. This applies to knowledge in certain professions, markets, regions, etc. as well as to the diverse talents of individuals. Individual freedom is an incentive and a mechanism for the social use of personal knowledge – knowledge that varies from person to person (Hayek, 1948).

A prerequisite for economic progress are scientific discoveries, technical inventions and economic innovations. However, in this context we often see failures. For this reason it is necessary that a large number of independent, creative individuals, work at making discoveries, inventions and innovations independently from each other. Numerous independent experiments in science, technology and the economy are needed to steadily increase prosperity for humankind. This requires the freedom of the individual. Individuals who are looking for new ways to do things and experiment with new options need freedom because they question conventions and wish to overcome these. The higher the number of individuals involved in this type of decentralized search process, the higher the chances of improving the prosperity of society as a whole (von Humboldt, 1980, pp. 64-5; Mill, 1974, p. 136).

The advantages of individual freedom do not only apply to the economy. They also apply to politics, science and other important areas of social life. For example, the competition among alternative opinions and concepts in politics contributes to the development of superior solutions to political problems. In science, the independence of research and the competition among scientists results in a permanent flow of new findings and the swift dissemination of the most significant of these new findings. The principle of accountability mostly motivates politicians and scientists to act responsibly with the freedom they enjoy, in the same way as entrepreneurs and workers in the economy.

As cultural evolution itself is a continuous competition among diverse values, institutions and groups, the main evolutionary advantage of individual freedom is that it helps to avoid rigidity in society's structures and promotes adaptability. All members of society are induced to rapidly adjust to changes in external conditions and

constantly search for new solutions to problems. As this process practically uses the full body knowledge and skills of all members of society and helps to achieve a higher degree of prosperity, a society that has extensively realized the principle of individual freedom has very good prospects of surviving and prospering in the competitive process of cultural evolution. Members of such a society even actively promote the process of cultural evolution – mostly unconsciously, however – by developing and testing new institutions in this competitive process (e.g. new laws or new forms of enterprise organization).

To benefit the most from the advantages of individual freedom in the process of cultural evolution, this freedom should be realized to the fullest extent possible. It should apply to as many areas of society as possible (especially in business, politics and science) and should allow all members of society the largest possible scope of freedom. A comprehensive realization of individual freedom does not mean that the cultural values and traditions of a country and the preferences of its citizens have to be ignored. On the contrary: first, depending on the cultural values and traditions and the respective historic situation of the country concerned, there are many different measures that can be taken to implement the principle of individual freedom. Second, and above all, individual freedom grants people the largest scope possible to pursue their personal goals – goals that in turn are shaped by the cultural values and traditions as well as the history their country. Individual freedom guarantees a high degree of goal attainment; which concrete goals people wish to attain (which goods they wish to consume, for example) is subject to their freedom of choice.

3.2 Rule of law

The second guiding principle states that not men should rule, but the law. The legal rules must, however, possess certain attributes (Hayek, 1960, ch. 10, p. 14):

- *Generality*. The rules must apply in the long term and to a multitude of unknown cases and persons.
- *Abstractness*. The rules may only specify that under certain circumstances the acts of individuals must meet certain requirements. All the many kinds of action that satisfy these requirements must be permissible. The rules may not contain any concrete commands and must apply independently of any of the personal goals pursued by people.
- *Certainty*. The rules must be fixed and announced beforehand to ensure legal certainty. Therefore, they may never apply retroactively.
- *Equality*. The rules must not benefit or harm known persons in a predictable manner. All persons must be treated equally. The law must apply equally to the government and the governed.

If the legal norms possess these attributes, arbitrary coercion by the government will be prevented and individuals will enjoy a great scope of freedom of action (Locke, 1988, pp. 373-81). Individuals can pursue their personal objectives by applying their individual skills and knowledge. The rule of law creates legal certainty; individuals know their rights and duties as well as those of their co-citizens, and are aware of the consequences of behavior that violates said rules. In conjunction with their personal skills and knowledge, individuals can use the legal norms as guidance for their decisions. The legal norms indicate what type of behavior can be expected of others,

and thus enlarge the extent to which they can foresee the consequences of their own actions. The legal rules form a reliable foundation that allows individuals to define their protected sphere and to know what type of behavior to expect of their co-citizens. Thus, the rule of law makes it easier for people to plan, cooperate, and coordinate their actions (Hume, 1992, pp. 293-300). In this manner, law enables the spontaneous emergence and existence of a complex order of human actions that may encompass millions of people. In this kind of order, each individual has the opportunity to pursue his personal objectives and good chances to achieve them. At the same time, the legal norms ensure that individuals pursuing their own interests also contribute to satisfying the needs of other people. Legal norms channel the actions that people take for personal motives in a manner that benefits society. An individual can only achieve his personal objectives if he respects the protected sphere of other individuals and offers them goods that they actually demand. Within the order of actions created by the rule of law, citizens use their personal knowledge for the benefit of the entire society, resources are efficiently allocated, and the plans and actions of people are efficiently coordinated. This creates greater prosperity that makes it possible to feed an ever larger number of people.

The rule of law not only contributes to increasing the prosperity of an entire society, but also helps society to survive the competitive process of cultural evolution. Changes in external conditions often affect only parts of society and become known at first only to a few individuals. To protect prosperity, and even to ensure survival, it is crucial that these individuals adjust as quickly as possible to these changes by using their special knowledge. As long as the legal norms are general, abstract, certain and equally-treating, individuals may rely on these norms and apply their knowledge of the "particular circumstances of time and place" (Hayek, 1948, p. 80) to adjust flexibly to changes in external conditions. At the same time, their actions are channeled by these norms in a manner so as to benefit the whole of society. This helps to decentrally absorb exogenous disruptions early on.

Adjusting to changing external conditions may call for the adaptation not only of people's behavior and society's order of actions, but also for the invention of new "internal" institutions and changes to existing ones, such as the development of new forms of enterprise organization or the modification of existing forms (Lachmann, 1963). This may also help to absorb exogenous changes and secure the prosperity and survival of society. General, abstract legal norms make the evolution of these types of "internal" institutions easier and thus improve the adaptability of society.

As most legal norms developed through evolution (even those that originally were intentionally introduced), they represent the outcome of previous experience that may be used as long as people act according to these norms. This experience may have been gathered over generations, experience of which people are no longer consciously aware. Taking advantage of the knowledge inherent in these legal norms is possible, although people have very limited knowledge of the benefits of applying a certain general rule under varying conditions, especially knowledge that can be articulated. The rules represent the evolutionary adaptation of an entire society to its external conditions and the nature of its members. General legal norms that have evolved in the course of cultural evolution represent knowledge of rules most suitable for social life that have proven feasible over time under different circumstances. They are important manifestations of cultural evolution and facilitate such evolution as long as they

possess the attributes mentioned above. This is another reason why these norms are important and beneficial for society in order for it to survive in the process of cultural evolution.

Government cannot centrally adjust the complex order of human actions and society's "internal" institutions to changed external conditions. This is because the knowledge needed by a society to uphold its complex, adaptable and prosperity-creating order of actions is partly stored in traditional legal norms and is partly dispersed across all members of society. The knowledge inherent in traditional legal norms is only in part consciously known; and it is impossible to completely centralize the personal knowledge dispersed across all members of society. For these reasons, traditional legal norms must be generally respected and the behavior of people must be restricted only by general, abstract, certain and equally-treating rules. This is the only way an extended society can adapt efficiently to circumstances that are permanently changing in unforeseeable ways. The alternative would be a continuous series of discretionary decisions and interventions by the government into society's spontaneous order of actions. However, this would prevent the legal rules from showing their adapting and prosperity-creating effects. The spontaneous order of actions as well as cultural evolution would be severely disrupted.

Although the state should be bound by the rule of law, within the scope of this principle lawmakers and the judiciary may regulate important areas such as contract law, labor law, tort law and administrative law. Also, the state has a wide scope of action to develop specific legal norms. The requirements to be met by legal norms from the perspective of cultural evolution are of an abstract nature. They may be met by a variety of rules. The concrete content of the rules may, and should, vary from country to country depending on the cultural traditions and people's preferences. As members of society additionally have a wide scope of freedom in applying the rules as instruments for the pursuit of their individual objectives, the rule of law is compatible with a large range of legal norms, personal objectives and forms of action.

In principle, politics should consistently adhere to the legal norms, because people base their behavior on these norms, and therefore the existence and adaptability of the entire spontaneous order of actions depend on the reliability and steadfast nature of the legal framework. Restraint should be exercised in modifying legal norms also because these must be in accord with the historically evolved, deeply-rooted and only gradually changing morals of a society. Nonetheless, legal reforms are needed if traditional law shows deficiencies or the changed external conditions require legal adjustments. As the spontaneous order of every extended society rests on a tradition of legal and moral norms passed down over generations, the meaning of which people are unable to fully grasp, we have to rely on tradition, though. New and amended legal norms must be consistent and compatible with the other rules. Just as these other rules, they must contribute effectively to the maintenance and adaptability of society's overall order of actions (Hayek, 1976, pp. 24-7).

3.3 *Subsidiarity*

According to the third guiding principle, the scope of action of the state must be closely limited and the state must be decentrally organized. However, the following functions of the state are indispensable:

- The state must recognize and protect the freedom of its citizens, e.g. freedom of speech, freedom of contract, and freedom of trade.
- The state must respect and protect the property of its citizens. It must define rules according to which individuals have the right to own and transfer property. The state must also guarantee that citizens are able to exercise their property rights.
- The state must enforce voluntary contracts, provided that they do not violate the law or morals.

These functions and a few others must be fulfilled by the state primarily with the help of the law. Legal norms must be designed to offer the members of society the best possible conditions for the pursuit of their personal objectives. To this end, the norms must also comply with the requirements stated in section 3.2. In particular, any coercive measures by the state must be in agreement with the rule of law. These types of measures must be limited to the enforcement of legal norms that are general, abstract, known and treat all individuals equally. On the other hand, measures should not be permitted that allow the state to discriminate against or favor specific individuals or groups using its coercive powers, for example, by imposing trade barriers or granting privileges. Also, legal norms should be rejected that curtail the freedom or property rights of citizens, even if these norms are general, abstract, known and guarantee equality, such as tax laws that erode property rights by imposing high taxes.

Apart from enforcing general legal norms that secure liberty, the state should also be responsible for providing specific vital goods that are not offered by private enterprises of their own accord – usually because these are public goods for which it would be too difficult or even impossible to make individual users pay for them. However, the provision of such goods by the state should not be of coercive nature, apart from collecting the taxes needed to finance such goods. Above all, the state should by no means be granted a monopoly. Private enterprises should always have the option of also offering these goods. Generally, the state should be subject to the same legal norms in providing these goods as private enterprises. Moreover, the goods supplied by the state should support the citizens in exercising their individual freedoms. They should create a benign framework for individual actions. Before the state provides a good, it should additionally be ensured that the benefits of the good clearly exceed the costs involved. In this context, one should take into account that public authorities and state-owned enterprises that usually are not at risk of going bankrupt tend to be rather inefficient. For this reason, the state should not produce the goods itself if possible, but rather use the services of private enterprises selected through competitive procedures (such as auctions or calls for tenders) which accept such commissions from the state and deliver at low costs. Finally, the state's activities should be limited to a low number of goods in order to keep the power of the state from extending beyond the necessary scope. Examples of such goods that should be provided by the state are infrastructure, education, social assistance and stable money.

To limit the activities of the state, appropriate provisions should be incorporated into constitutional law. Such constitutional norms may restrict the type of functions that the state should fulfill or the type of goods that the state should provide and/or limit public revenue or expenditure in quantitative terms (such as a defined ceiling expressed as a percentage of GDP)[5].

The state should therefore play a subsidiary role: public authorities should only intervene in those cases in which the possibilities of individuals or small groups (e.g. families) do not suffice to fulfill an essential task. In these cases, assistance for self-help should be given priority over the state directly taking over tasks. The principle of subsidiarity should also apply to the allocation of tasks within the public sector: if the state must take over a task, responsibility for the fulfillment of the task should be assigned to the lowest possible level of the state hierarchy (e.g. municipality).

The strict limitation and decentralized organization of the state's activities should also enable competition among the various institutions. By granting private actors the largest possible scope of action, these should have the option of developing many different forms of enterprise organization or contracts and to test these through competition. The decentralized organization of the state should allow competition among state bodies (e.g. municipalities).

Why is it necessary to concentrate the state's activities on the functions mentioned above and also strictly define their scope? By securing freedom and the property rights of citizens, and enforcing voluntary contracts through general legal norms, the dispersed knowledge of individuals is used to help adjust the extended social order of actions flexibly and inexpensively to constantly changing external conditions. Also, conflicts between individuals are being avoided beforehand or settled at low social costs. Moreover, individuals have the option and the incentive to constantly develop new goods, production processes, institutions, etc. Due to the strict limitations of the state's activities, the government or the ruling majority cannot suppress such new ideas and practices. This is important because new goods, production processes, institutions, etc., are always being introduced in the following manner: A small minority initially deviates from the practices of the majority – often against their resistance. Only after the new proves more efficient than the old, does the majority start to consider taking over such practices (Mises, 1927, p. 48). The limitation of the state's activity thus produces more innovations that help society to improve its standard of living and better adapt to changing circumstances. By contrast, if the state has vast power, if citizens are being shackled by numerous regulations, and if a large portion of their income is being confiscated by high taxes, they will hardly have the opportunity or the incentive to adjust to changed circumstances by applying their knowledge (e.g. by developing new institutions that are better suited to fit into the new circumstances). This diminishes society's capability to function and adapt. Society becomes susceptible to exogenous shocks or a gradual erosion of its competitiveness in the process of cultural evolution. This also lowers people's prosperity, or at least the rate of economic growth.

Coercive state measures that discriminate against or favor specific individuals or groups are also very harmful. Not only do these types of interventions contradict the rule of law, most importantly they restrict and impede the mutual adaptation of individuals on which the spontaneous order of actions and the evolution of social institutions rest. Those individuals subject to the state's coercive measures are hindered from pursuing their personal objectives and from taking advantage of the circumstances they know. Those who are granted privileges by the state are unilaterally relieved from the necessity to adapt to circumstances to which they would be exposed without such interventions. Thus, such interventions can threaten the adaptability, evolution, and even the very existence of the social order concerned.

Although for the reasons given above the scope of the state's activities should basically be strictly limited, it is important that the state be responsible for certain essential, especially public goods that are not offered by private enterprises on their own initiative. These goods can be crucial for the international competitiveness of a society. Examples include infrastructure and an educational system that foster productivity. But also a fundamental good such as stable money is of eminent importance. It secures nominally fixed property rights and ensures that the system of flexible market prices can fulfill its signaling and allocation function. This is not only beneficial to the welfare of a society, but it also increases society's adaptability because information transmitted through price changes prompt people to respond adequately to changing circumstances[6].

Through the consistent application of the principle of subsidiarity and intensive institutional competition, a large number of solutions to problems are constantly being generated, tested and compared decentrally. Inappropriate measures and institutions can be eliminated at an early stage; in this manner they produce only low social costs. The solutions that prove to be superior are in turn generally adopted and become widespread throughout society. This process of experimentation, of constantly producing a large number of alternatives (institutional alternatives, in particular), the selection through competition and the dissemination of the best-suited solutions are of major significance for the adaptability of society in the process of cultural evolution, mainly because developments can always go wrong in the case of intentionally designed solutions and even in the unplanned evolution of institutions. For instance, intentionally designed institutions may prove to be unworkable in practice. In certain areas, unintentional institutional evolution can also develop along the wrong path that reveals itself as unsuitable only after a certain period of time. Moreover, barriers to evolution may arise. The more intensive the institutional competition, the more institutional alternatives are being generated, the stronger is the selection pressure and the higher is the probability that inefficient institutions are being discovered and eliminated at an early stage, and that developments leading to dead-end streets are being reversed or barriers to evolution are being overcome. A prerequisite for the functioning of institutional competition is, of course, a society that is always open to innovation externally and internally.

The realization of the principle of subsidiarity cannot take place arbitrarily. First of all, it must be oriented on the requirements of cultural evolution. For this reason, it must be applied as consistently as possible. For example, the scope of the state's activity must be effectively restrained by appropriate constitutional provisions. Institutional competition should not only be permissible, but the outcome should not be counteracted by other measures taken by politicians. However, as long as the requirements of cultural evolution are met, the scope for action will still be large. This scope may be used in a manner that corresponds to the preferences of the members of society. For example, which public goods are made available, their quality and quantity, who produces them and how they are financed can be decided in accordance with the preferences of the members of society as long as the requirements of cultural evolution are met.

4. Conclusion

Although democratic competition among different political programs is, as argued above, an important means for a society to survive in the process of cultural evolution, in one

respect the political implications of cultural evolution are fundamentally different from the role that politics are supposed to play in a democracy – at least according to today's prevailing opinion. Today, it is undisputed that politics must solely put into practice the current will of the people. The preferences of citizens should be transformed into politics as far as possible (Waschkuhn, 1997). From the perspective of cultural evolution, however, the primary, overriding goal of politics must be the survival of the respective society for which politics bears responsibility, not the current will of the people[7]. Although people's wishes often match the requirements of cultural evolution, this is by no means always the case. For instance, in order to implement the principle of "social justice" and to satisfy the wishes of influential interest groups, many political measures are demanded and carried out today that are incompatible with the requirements of cultural evolution. However, if a society does not meet these requirements, it is at risk of losing its prosperity and in extreme cases of decline or even extinction. In the light of the crucial role that the institutions mentioned above have played in the rise of the Western world and the strong selection pressure exerted by cultural evolution today, the guidelines set out in this paper should be followed consistently – even if this means going against some of the day-to-day wishes people have. Only if the requirements of cultural evolution are met will there be enough scope to satisfy people's wishes.

Notes

1. For more on the Industrial Revolution, see Ashton (1969), Hartwell (1971), North and Thomas (1973), Rosenberg and Birdzell (1986), North and Weingast (1989), Landes (1998).
2. The theory of cultural evolution, on which this paper is based, was developed mainly by F.A. Hayek (1967, 1973, 1976, 1979a, b, 1983, 1988). Important contributions also came from Hume (1992), Smith (1981, 1985), Ferguson (1995), von Humboldt (1994), von Savigny (1840-1851), Maine (1888, 1986), Darwin (1990), Menger (1883), Hobhouse (1951), Carr-Saunders (1922), Alchian (1950), White (1959), Quigley (1979), Campbell (1965, 1975, 1983, 1987), Alland (1967), Popper (1984), Geertz (1973), Service (1975), Wickler and Seibt (1991), Ullmann-Margalit (1977), Eccles (1979, 1989), Pulliam and Dunford (1980), Bonner (1980), Lumsden and Wilson (1981), Cavalli-Sforza and Feldman (1981), Axelrod (1984), Boyd and Richerson (1985), Hallpike (1986), Johnson and Earle (1987), Ostrom (1990), Durham (1991) and Sanderson (1999).
3. See Buchanan (1975, p. 194; 1981, pp. 45-6), Brennan and Buchanan (1985, pp. 9-10), Gray (1986, p. 142), Miller (1989, p. 314), Voigt (1992, p. 465) and De Vlieghere (1994, p. 293). A critical discussion of this and other criticism of the theory of cultural evolution can be found in Feldmann (forthcoming).
4. "It was a repertoire of learnt rules which told him what was the right and what was the wrong way of acting in different circumstances that gave him his increasing capacity to adapt to changing conditions – and particularly to co-operate with the other members of his group. Thus a tradition of rules of conduct, existing apart from any one individual who had learnt them, began to govern human life. It was when these learnt rules, involving classifications of different kinds of objects, began to include a sort of model of the environment that enabled man to predict and anticipate in action external events, that what we call reason appeared. There was then probably much more 'intelligence' incorporated in the system of rules of conduct than in man's thoughts about his surroundings ... The mind is embedded in a traditional impersonal structure of learnt rules, and its capacity to order experience is an acquired replica of cultural pattern which every individual mind finds given. The brain is an organ enabling us to absorb, but not to design culture" (Hayek, 1979a, p. 157).

5. Constitutional economics analyzes the necessity and possibilities of limiting the scope of the state's activity through constitutional law. An overview and a critical assessment of this approach can be found in Feldmann (1999, pp. 80-94, 230-50). The author of this paper has also developed concrete proposals for the constitutional limitation of tax burdens (Feldmann, 1998a) as well as for the limitation of public borrowing (Feldmann, 2002).
6. The author of this paper has developed a remuneration system for the members of the Governing Council of the European Central Bank, which is designed to encourage said members to effectively and lastingly pursue a strictly stability-oriented monetary policy (Feldmann, 1998b). A system of this type is necessary mainly because in many member states of the European Monetary Union a "stability culture" comparable to Germany's does not yet exist.
7. This by no means implies that some type of authoritarian or totalitarian political rule is being advocated. Such type of political rule would conflict sharply with the guidelines set out in this paper. Rather, it seems worthwhile to consider grounding these guidelines in constitutional law.

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The formation of conventional expectations in Keynesian fundamental uncertainty

Keynesian
fundamental
uncertainty

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Keywords *Social economics, Keynesian economics, Expectation*

Abstract *This article develops an analysis of the conventional formation of expectations by means of introducing an overlooked factor in the analysis: the role of inference. Individual inferences and changes in evidential weight of beliefs and in the state of confidence are integrated with an analysis of the conventional character of expectations in a manner that is consistent with evidence provided by research in social psychology. This approach provides the link between the “agency” approach and the “structure” approach in Keynesian analysis that has been stressed as an important development. It also improves our understanding of the mechanisms underlying economic behavior under uncertainty such as liquidity-preference in different social and cultural settings.*

Introduction

In this paper, I shall develop a theoretical framework, which will be used to clarify and develop Keynes's idea of the conventional character of expectations. The latter has received considerable attention by various authors recently. Among other economists, Lawson (1997) stressed the need for a potential substantive development in post-Keynesian analysis by means of integrating accounts of “agency” with “structure”. This idea will be elaborated in the context of this paper, by means of linking agents' expectation formation which is based on the state of confidence with conventional attitudes. Recent methodological work by Runde (1994) and Dequech (2000) has emphasized the role of evidential weight as a function of relevant evidence of information, the state of confidence and uncertainty perception. However, this analysis overlooks an element that was stressed explicitly by Keynes in his discussion of the state of confidence and the “conventional” formation of expectations, individual inference. Given the growth of social psychology research on issues of perception, inference and behavior, I utilize evidence from this field to examine conventional expectation formation under fundamental uncertainty. Thus, I will present a suggested interpretation of Keynes's idea of conventional expectations which I will show is linked with the idea of the state of confidence and which I will also introduce in a general social psychology framework of the determinants of the state of expectations. This methodological approach is useful because it helps introduce the idea of the conventional formation of expectations in the analysis of liquidity-preference for the purpose of macroeconomics, monetary economics and financial economics. It also serves as a foundation for understanding economic behavior under diverse social and cultural settings.



Keynes's transition from behavior analysis to structure: the idea of conventions in decision making

In addition to his views on the weight of argument and its relation to the state of confidence, Keynes supported the idea that in many cases expectations are grounded

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on conventions. The latter view of Keynes was advanced after the publication of the *A Treatise on Probability* (Keynes, 1973a). The contemporary literature on probability theory emphasized the response of Ramsey to Keynes's acceptance of the logical character of probability theory rather than his emphasis on the effect of the state of confidence on subjective expectations (see Hackling, 1990, p. 165). Ramsey (1931, p. 161) claimed that the probability relations that Keynes proposed were non-existent because they were not necessarily perceivable. Instead, Ramsey proposed a subjective basis for the formation of beliefs solely governed by the desires and the opinions of individuals. He claimed that the desires of the individuals were measurable and additive and introduced a "psychological law", according to which, the actions of individuals depend on their measurable desires (see Ramsey, 1931, pp. 173-4). Given the assumption that the agent will enjoy a measurable "good" if he is right and a measurable loss if he is wrong, Ramsey proposed the confidence of an agent to be measured by the extent, d , by which he was willing to conduct research (see Ramsey, 1931, p. 175). Ramsey therefore implicitly argued that the extent of the learning-process was limited by the net utility of the measurable "good" and, therefore, probability beliefs are affected by the utility functions of the individuals[1]. Moreover, Ramsey advanced the fundamental laws of probable belief which are always measurable. He claimed that given two propositions p and P , and a secondary proposition q , the fundamental laws of probable beliefs hold only when the assumption of knowledge of a given secondary proposition q required for the formation of expectations is not questioned (see Ramsey, 1931, p. 181)[2].

A review of the literature reveals very little about the response of Keynes to the criticism of Ramsey. The only reference can be found in Keynes's *Essays in Biography* (see Keynes, 1972, pp. 335-46). Keynes capitulated to Ramsey and accepted that if our degrees of belief are coherent in Ramsey's sense, then they will conform to the calculus of probabilities. However, he argued that it was difficult to distinguish between rational beliefs and beliefs in general. This distinction corresponds to the distinction between rationality and human rationality, which was generally accepted by both the proponents of the "subjective" and "logical" school in later debates. Among proponents of the "subjective school", Jeffrey (1973) and Suppes (1973) agreed that human rationality was subject to: changes of attention and in selection of evidence; finite memory; concept formation; and reliability of data available to individuals.

This objection to the general validity of the propositions of the "subjective school" was implicit in Keynes's analysis (see Keynes, 1973a, p. 77). In principle, individuals do not know how far to carry their learning[3]. Thus, Keynes implicitly rejected the assumption that learning was limited by the net utility of individuals because it was subject to limitations of human rationality associated with changes in attention, selection of evidence, finite memory, concept formation and reliability of data. The issue remains still unsettled. Later attempts in the field of logical probability such as these of Carnap (1950), Reichenbach (1949), Popper (1951) and Lakatos (1973) provided useful insights but failed to provide a conclusive alternative determination of the learning process.

However, Davis (1994) claimed that Keynes did not accept fully Ramsey's critique because he still believed that there was something more substantial than mere belief to explain the nature of judgement and that was the "conventional" nature of beliefs. According to Davis, Keynes insisted on his position by changing his argument, which

was initially based on Moore's critique of the neo-hegelian idealism according to which there is a determinate and objective judgement. Keynes admitted in his post-*General Theory* "My earlier beliefs" that individual judgement should be based on "convention and traditional standards and inflexible rules of conduct" (see Keynes, 1972, p. 447). According to Davis, this latter argument signifies a shift in Keynes's view of uncertainty from a metaphysical entity bound up with the unknowability of the future to a social in essence relation characterized by the stability and instability of different structures of interdependent belief expectations. In this context, Ramsey's subjectivism, where only consistency of bets need obtain, falls short of Keynes's belief that society's conventions and rules assist individual judgment.

The conventional nature of expectations, the state of confidence and individual inference

The link between the analysis of the state of confidence and the idea of the "conventional" formation of expectations became obvious in Keynes's (1973b) writings in the *General Theory*. Keynes attempted to develop an alternative theory of interest to that of standard economic theory in order to support the idea of underemployment equilibrium. Keynes's analysis of the money market in the *General Theory* begins with an identification of the motives for holding money. According to this analysis, there are three motives for holding money, the transactions, the precautionary and the speculative motive. The latter was described by Keynes as being due to "the object of securing profit from knowing better than the market what the future will bring forth" (see Keynes, 1973b, p. 170). It is through the working of the speculative motive, as well as through profitability expectations, that uncertainty and expectations enter in Keynes's analysis.

Samuelson argued that Keynes's analysis in the *General Theory* "paves the way for a theory of expectations" (see Samuelson, 1946, p. 320; see also on this point Patinkin, 1976, p. 142). However, Keynes had difficulty in providing a rigorous theory of expectations to support the working of the speculative motive. Instead, he advanced three alternative mechanisms in order to explain the level of the interest rate. These were:

- (1) the concept of long-term expectations (see Keynes, 1973b, pp. 148-9);
- (2) the claim that what matters is not the absolute level of interest rate but market expectations about the future policy of monetary authority (see Keynes, 1973b, p. 201); and
- (3) the notion that the interest rate is a "conventional phenomenon" (see Keynes, 1973b, pp. 203-4)[4].

However, even those mechanisms were deficient. With regard to (1), it is very difficult to establish a priori in which direction the state of confidence will change in the long run. In addition, "long-term expectations" are expectations of changes in technology, tastes of consumers, and effective demand in the long run which pose additional difficulties in the utilization of this concept. In essence, the effects of "long-term expectations" may not be possible to be dealt within formal analysis and can hardly be estimated. With regard to proposition (2), which stresses the importance of deviation of expectations around a "normal" level of interest rate, there is the well-know possibility of non-determination of the actual level of rate of interest. Moreover, Keynes's idea of

the determination of interest rate in conventional manner was not elaborated in detail[5]. In this context, a suggested interpretation of Keynes's idea of the conventional character of expectations by means of classification and analysis of his sporadic remarks is useful. Keynes's hints in the *General Theory* with respect to the conventional character of expectations can be codified and used as the basis for the development of a generalized framework for the analysis of the formation of expectations. Some studies towards this direction have already been developed. For example, Littleboy (1990) provided an illustration of conventional zones that are expressed in terms of income and prices and represent the strength of convention across markets. Davis (1994) mentioned that the conventional formation of expectations depends on the state of confidence because for the convention to be formed investors act on their shared confidence. He accepted that the state of confidence was central to Keynes's analysis of the conventional formation of expectations (see Davis, 1994, p. 138).

Thus, the idea of a conventional formation of expectations is associated with two basic ideas, the state of confidence and the shared tendency of the decision makers to converge to uniform expectations[6]. With respect to the state of confidence, Keynes (1973b, p. 152, italics added) wrote that:

... in practice we have tacitly agreed, as a rule, to fall back on what is, in truth a convention. The essence of this convention – though it does not, of course work out so simply – lies in *assuming that the existing state of affairs will continue indefinitely*, except in so far as we have specific reasons to expect a change ... For it can be easily shown that the assumption of arithmetically equal probabilities based on a state of ignorance leads to absurdities. We are assuming, in effect, that *the existing market valuation, however arrived at, is uniquely correct in relation to our existing knowledge of the facts* which will influence the yield of the investment, and that it will only change in proportion to changes in this knowledge.

Keynes argued that the existence of limited information about the future does not allow investors to know how to develop correct investment estimates. Instead, they assume that they know on the basis of existing or current knowledge or information. The assumption of the indefinite continuity of the “existing state of affairs” is equivalent to the assumption that market evaluations were uniquely correct regarding the knowledge of the existing information. In this case, individuals assume or infer that they know the relevant information and that they can form their expectations on the basis of their assumptions. Palley (1993) correctly argued that there is a relation of the extent of knowledge of economic agents with Keynes's view of the conventional nature of expectations. Although Keynes did not state explicitly in which circumstances the convention broke down, he provided a hint. He wrote that:

... in abnormal times in particular, when *the hypothesis of an indefinite continuance* of the existing state of affairs is less plausible than usual even though there are no express grounds to anticipate a definite change, the market will be subject to waves of optimistic and pessimistic sentiment, which are unreasoning and yet in a sense legitimate where no solid basis exists for a reasonable calculation (Keynes, 1973b, p. 154, italics added).

Keynes claimed therefore that both objective and subjective factors were responsible for the conventional formation of expectations. One objective factor that contributes to the breakdown of the convention is a “very large” change in the “existing state of affairs” (see Keynes, 1973b, p. 153). Thus, a major change in current information or

knowledge affects evidential weight which individuals experience and, therefore, their state of confidence.

Moreover, Keynes argued that expectations were affected by “definite changes” in the existing state of affairs (see Keynes, 1973b, p. 154), by seasonal reasons, by investment practices and by limits in the time available for changes in portfolio allocation during a price deflation. Thus, he wrote that:

... investment becomes reasonably ‘safe’ for the individual investor over short periods, and hence over a succession of short periods however many, if he can fairly rely on there being no breakdown in the convention and on his therefore having an opportunity to revise his judgement and change his investment, before there has been time for much to happen (Keynes, 1973b, p. 153)[7].

The appearance of pessimistic and optimistic sentiment therefore is associated with the breakdown of the “*hypothesis* of an indefinite continuance of the existing state of affairs”. This breakdown depends on major changes that provide new information and threatens the “safety” of investment in financial and capital goods. Moreover, Keynes argued that “conventional” expectations depend on the institutional structure of the society. Keynes cited the improvement of investment markets as a factor that reinforces speculation in his analysis of the effects of speculative activity on investment (see Keynes, 1973b, p. 158). According to Keynes, the development of capital markets forces the investor not to “direct his mind to the long-term prospects” of an investment project (see Keynes, 1973b, p. 160).

The above mentioned sporadic remarks of Keynes in the *General Theory* regarding aspects of the conventional formation of expectations can be classified and connected in the following manner: First, the knowledge of individuals about the future is always limited at the present time. This also implies that individuals possess limited knowledge about the behavior of other participants in the market. However, individuals may rely on the convention of assuming or inferring that their information about the future is a projection of their current knowledge. The assumption of knowledge of information about the future on the basis of current evidence results in a convention in which a belief can be based upon probability estimates while another belief can be based upon changes in evidential weight and in variations of own confidence; When there are no major changes in the current state of affairs investors assume or infer that their knowledge of information about the future is “correct” and that, in this case, they may feel comfortable to develop their estimates on a conventional basis only upon models that extrapolate the present to the future as it is the case with probability analysis. This process is reinforced by the fact that by observing each other participant decision makers develop a shared confidence on this convention. However, when there are major changes in the state of affairs, there is an inconsistency between individual perceptions and dispositions that are favorable to the maintenance of the convention. Individuals perceive that their knowledge or information about the future is limited. They cannot any more rely on the conventional comfort of inferring that their information about the future is as complete as their knowledge at the present time and their confidence becomes low. Thus, there is a clear relation between the state of confidence and the breakdown of conventional expectations.

Their shared confidence on the convention of developing their beliefs on the basis of projecting their current knowledge to the future probability breaks down and they now

form their expectations upon their own state of confidence which varies directly with evidential weight and their estimate of their relevant knowledge of future conditions to their relevant ignorance. In the case in which the state of confidence becomes very low, investors assume that no current evidence can assist them in forming expectations. As a consequence, they become completely liquid in their investment positions. In addition, the formation of investment estimates on the basis of “dynamic systems of interdependent beliefs” that rely on the assumption of the “indefinite continuance of the state of affairs”. In a macroeconomic context, chronic unemployment is the result of the effect of those psychological attitudes. Littleboy (1990) argued also that for Keynes the convention breaks down when “the uncertainty as to the future which accompanies a collapse in the marginal efficiency of capital naturally precipitates a sharp-increase of liquidity preference” and that many economists failed to consider this feedback effect.

Keynes’s views on conventional expectations and a social psychology general framework of the determinants of the state of expectations

With respect to the relation between the conventional formation of expectations and the tendency to hold uniform expectations, there are two claims of Keynes that seem important. Keynes (1973b, p. 204, *italics added*) argued that:

... it might be more accurate, perhaps, to say that the rate of interest is a highly *conventional*, rather than highly psychological, phenomenon. For its actual value is largely governed by the prevailing view as to what its value is expected to be. Any level of interest which is accepted with sufficient conviction as likely to be durable will be durable; subject, of course, in a changing society to fluctuations for all kinds of reasons round the expected normal.

In addition, Keynes provided a different theory of financial market behavior in his *General Theory* because the operations of financial market were compared to a “beauty contest”. Keynes did not in fact refer to an actual Miss World contest but to a British tabloid Sunday newspaper which asked readers to rank picture of young women in the order which they believed would correspond to the average preferences of the competitors as a whole. So in order to win, own-preferences are not as important as the anticipation of “what average opinion expects average opinion to be” (Keynes, 1973b). Accordingly, financial markets are driven by average opinion about what average opinion will be. A great premium is placed on any information or signal that provides a clue to changes in average opinion.

Thus, for Keynes the idea of conventional expectations is related with specific phenomena. First, there exists the formation of a prevailing view that is shared on average by market participants. This prevailing view is one towards which decision makers converge because they attend to the behavior of other market participants. Here, we have a case of inference in the sense that decision makers form their estimates by inferring that the prevailing view that is shared by many is correct and by accepting as information the opinion of others. Thus, the tendency to form uniform expectations under social influence implies clearly the role of inference. The process of attempting inferences in the presence of fundamental uncertainty is highly overlooked in post-Keynesian literature. Yet, as I mentioned above, Keynes stressed the importance of individual assumptions and referred explicitly on the role of inferences.

Today, there is also ample evidence in the field of social psychology on the subject of inferences and convergence to uniform beliefs. According to the seminal work of social psychologist Asch (1946), people draw inferences about others or situations that we do not

know directly and they will infer the presence of some qualities from our knowledge of others. The application of this argument in Keynes's framework is straightforward: people do not know the future directly but they can infer their knowledge of it from their knowledge of the behavior of others at the present time. In addition, the process of conformity involves the presence of stress because subjects come to doubt their own perceptions and their own power of thought as well as that they see the same world everyone else sees (see Asch, 1956). Thus, the convergence to conformity is obviously associated with lack of confidence about our abilities both in the absolute sense as well as relatively to others. In addition, when individuals are influenced because they accept other subjects as sources of information they respond to informational pressure but when they conform because they fear the negative reaction of other people towards them they respond to normative pressure. Conformity is reduced under certain conditions: the presence of heterogeneous preferences (see Crutchfeld, 1955), the perception of different even lonely views against the majority (see Allen, 1965) and the strong but often persuasive over time disagreement of minorities (see Nemeth, 1986). Sometimes, the presence of ambiguity of signals may lead to internalization of the conformity (see Sherif, 1935).

The situation in which individuals come to act in contrast with their beliefs or attitudes seems to be better explained by cognitive dissonance theory developed by Heider (1946), Festinger (1957) and Aronson (1969). According to this theory, when cognitions or beliefs about an object are inconsistent with its perception, decision makers experience a state of unpleasant arousal associated with negative implications for their sense of self-worth and they will try to reduce it by distorting one or more of their own beliefs. The distortion of beliefs in order to sustain the affirmation of a good sense of self-worth involves relative comparison of own beliefs with those held by others and leads inevitably to convergence towards prevailing beliefs (other than own). The process of conformity because subjects come to doubt their own perceptions and their own power of thought as well as that they see the same world everyone else sees (see Asch, 1956). In addition, according to the self-perception theory proposed by social psychologist Bem (1965), decision makers determine their attitudes about something they do not know by inferring them with current knowledge or experience that is already available to them (possibly by others). Thus, the knowledge of how a decision maker will react to an investment danger in the future is a generalization based on the experience with other market participants. Thus, the convergence to conformity is obviously associated with lack of confidence about our abilities both in the absolute sense as well as relatively to others. Therefore, the convergence towards prevailing conventional views takes place because of lack of confidence.

In his attempt to provide a general framework of the determinants of the state of expectations, what Dequech (1999) omits to discuss is the idea of conventional or prevailing expectations put forth by Keynes. First, in the context of his framework, these conventional expectations are definitely influenced by individual disposition, lack of knowledge and lack of creativity. Another determinant for the formation of conventional expectations is lack of knowledge. Sometimes, the lack of knowledge of investors and their low confidence is too costly and can be reduced in an easier manner by sharing a conventional view with the other decision makers rather than by learning and increasing the amount of relevant knowledge, if possible, and the weight of individual belief or argument.

We can therefore enrich our analysis by introducing conventional expectations in a generalized framework of the determinants of the state of expectations. Dequech (1999) provides a framework of liquidity-preference under uncertainty by assuming that the three basic determinants of expectations are the optimistic disposition or animal spirits of investors, their knowledge and creativity. Changes in knowledge and disposition to uncertainty determine uncertainty perception. The state of expectations is also influenced by creativity, knowledge and spontaneous optimistic disposition as well as by the state of confidence. Thus, at this level of abstraction, conventional expectations enter in the analysis with respect to three factors: dispositions to conformity, the role of inferences and the state of confidence. First, in addition to their emotional dispositions, decision makers have certainly a disposition towards following or resisting prevailing views. The dispositions, which decision makers have towards conventions, influence the state of expectations in the same manner in which Dequech describes that the optimal disposition affects the state of expectations. In addition, we have to introduce inference because decision makers form their estimates by actually inferring that the prevailing view that they observe is correct and by accepting the opinion of others as a piece of information. Thus, inference plays a direct role in the formation of conventional expectations. In addition as I mentioned above, the lack of confidence about our abilities both in the absolute sense as well as relatively to others can lead to convergence to prevailing expectations. Thus, the state of confidence is associated with conventional expectations. These considerations about the conventional formation of expectations are represented in Figure 1.

The above scheme adopts the basic characteristics of the framework that was proposed by Dequech (1999) regarding the role of optimal disposition, knowledge (and uncertainty perception) and creativity. But, unlike this approach, it introduces a missing element in the analysis, the role of the conventional formation of expectations. This is achieved in three different ways. First, it introduces the disposition that individuals hold towards conventions which influences expectations directly. Second, it introduces the role of inference, which is an essential mechanism in the formation of conventional of expectations. Lastly, it shows explicitly the relation between the state

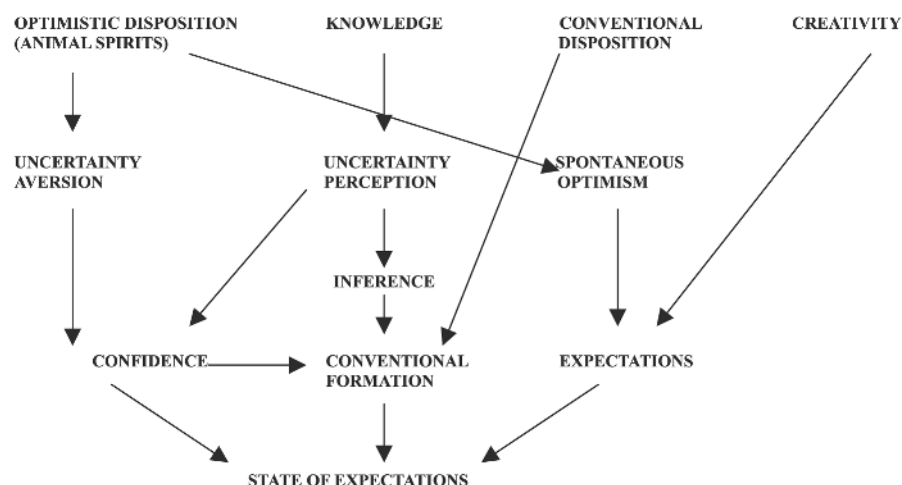


Figure 1.
Conventional formation of
expectations

of confidence (or better, the lack of it) and the tendency to form expectations following the prevailing view. When the lack of confidence leads to the acceptance of the prevailing view, the conventionally formed expectation influences the state of expectations. In this vein, there is a robust microeconomic framework regarding the determinants of the state of expectations.

Conclusions

Keynes's views on the conventional character of expectations are in fact related with his analysis on the state of confidence and the role of evidential weight. His writings in the *General Theory* indicate that when dealing with uncertainty he rejected the sole utilization of either psychological propensities or conventions. The framework, which was developed above provides the means of classification and further analysis of Keynes's sporadic remarks and the basis for an elaboration of the idea of the conventional character of expectations in the context of a general framework of the determinants of the state of expectations and with the aid of evidence provided by research in the field of social psychology. The conclusions of this analysis stress the influence of the state of confidence and individual inferences. The limitations of our perceptions about the future generate greatly the rise of a conventional manner in the formation of individual expectations that converge towards prevailing market views. In this context, the development of the hypothesis of the conventional character of expectations on the basis of the influence of individual inference and of its relation with the state of confidence, which was presented here contributes a useful analysis to an overlooked area in the post-Keynesian analysis of uncertainty and the state of expectations.

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Notes

1. The probability, p , of a proposition is zero if the numerator of the second component of the right-hand expression of equation (1), the research parameter $f(d)$ equals the net utility of individuals; it is one if the research parameter is zero.
2. In this vein, Ramsey (1931, p. 164) wrote that "there is only such relation and consequently only one true relevant secondary proposition, which of course, we may or may not know, but which is independent of the human mind. If we do not know it, we do not know it and cannot tell how far we ought to believe the conclusion".
3. Thus, Keynes (1973a, p. 77) wrote that "we may argue that, when our knowledge is slight but capable of increase, the course of action, which will, relative to such knowledge, probably produce the greatest amount of good, will often consist in the acquisition of more knowledge. But there clearly comes a point when it is no longer worth while to spend trouble, before acting, in the acquisition of further information, and there is no evident principle by which to determine how far we ought to carry our maxim of strengthening the weight of our argument. A little reflection will probably convince the reader that this is a very confusing problem").
4. Keynes (1973b, p. 204, italics added) argued that "it might be more accurate, perhaps, to say that the rate of interest is a highly *conventional*, rather than highly psychological, phenomenon. For its actual value is largely governed by the prevailing view as to what its value is expected to be. Any level of interest which is accepted with sufficient conviction as likely to be durable will be durable; subject, of course, in a changing society to fluctuations for all kinds of reasons round the expected normal".
5. These ideas of Keynes on expectations are obviously different from the notion of rational expectations. Although individuals do not need to know the entire model in most rational

expectations models, the behavior of the economic variables for which individual agents form forecasts is itself affected by the way in which economic agents form their expectations. Thus, if economic agents learn something about how to forecast an economic variable, the random properties of the economic variable may change in consequence. Rational expectations equilibrium is achieved only when people have adopted a way of forecasting that is consistent with the model. There is a sizeable literature on the solution of rational expectations models containing future expectations of the endogenous variables with different solution techniques (for the basic developments, see Muth, 1961; Shiller, 1978; Sargent, 1979; Sargent and Wallace, 1976; Pesaran, 1987; Gourieroux *et al.*, 1982; Broze and Szafarz, 1985).

6. With respect to the first two propositions, Keynes (1973b, pp. 148-9) argued that “the state of confidence, as they term it, is a matter to which practical men always pay the closest and most anxious attention. But economists have not analyzed it carefully and have been content, as a rule to discuss it in general terms. In particular, . . . there are not two separate factors affecting the rate of investment, namely, the schedule of the marginal efficiency of capital and the state of confidence. The state of confidence is relevant because it is one of the major factors determining the former, which is the same as the investment demand-schedule”.
7. With the general expression “investment”, Keynes refers to demand for assets, capital and financial assets.

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