Equality and efficiency in the labour market: Towards a socio-economic theory of cooperation in the context of a globalizing economy

WZB Discussion Paper, No. FS I 92-1

Provided in Cooperation with:
WZB Berlin Social Science Center

Suggested Citation: Schmid, Günther (1992) : Equality and efficiency in the labour market: Towards a socio-economic theory of cooperation in the context of a globalizing economy, WZB Discussion Paper, No. FS I 92-1, Wissenschaftszentrum Berlin für Sozialforschung (WZB), Berlin

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Equality and Efficiency in the Labour Market

Towards a Socio-Economic Theory of Cooperation in the Context of a Globalizing Economy

Günther Schmid
Abstract

Equality and Efficiency in the Labour Market

There is a big trade-off between equality and efficiency according to mainstream economists. From a socio-economic point of view, however, it depends upon circumstances and the precise definition of equality and efficiency. The paper shows that in special situations equality is even a precondition for more efficiency. In an extended transaction cost theory, four types of the employment relationship are developed: markets, hierarchies, social networks, and civil rights. While in markets and hierarchical regimes equality may affect efficiency negatively, social networks and civil right regimes (entitlement) are characterized by egalitarian principles compatible with or even complementary to efficiency. Indeed, market regimes are not superior in any case. The study identifies the context conditions under which the four employment regimes are most effective.

Zusammenfassung

Gleichheit und Effizienz auf dem Arbeitsmarkt

EQUALITY AND EFFICIENCY IN THE LABOUR MARKET

Towards A Socio-Economic Theory of Cooperation in the Globalizing Economy

Introduction

It has become common to justify increasing inequalities in market income with reference to the economic disaster in Eastern Europe. The so-called socialist economies seem to remind us of an old economic wisdom: "You can't have your cake of market efficiency and share it equally." Apart from the counterfactual evidence of a nomenclatura that made a small political elite more "equal" than ordinary people, however, the egalitarian approach of "real socialism" was far from conforming to widely accepted principles of justice in liberal democracies. The allocation and evaluation of jobs according to political loyalty and alleged proletarian origin or status -- to mention only two examples -- contradict even the most rudimentary values of justice in any type of market economy: equal access to jobs for all, and at least some performance oriented renumeration of jobs.

Thus, the failure of bureaucratic socialism teaches us no lesson with regard to the real challenges in front of us. The current widespread crossing of political, technological, and social frontiers is only a necessary but still not a sufficient condition for the synchronization of economic and social progress. The extended field of players in the market game as well as the increased range of games require new "civilized boundaries" by

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1 Slightly revised paper for the IAREP/SASE Conference in Stockholm, June 16-19, 1991; thanks for valuable comments to an earlier version go to Gernot Grabher and Nigel Meager. The paper was drafted during my fellowship at the Netherland Institute for Advanced Studies (NIAS), February to June 1991. Thanks go also to Andy Watt for improving the English.
institutions that must be seen both as constraints and supports; as limiting but also as guiding norms of cooperation. Here the term "cooperation" refers to developing accepted procedures for engaging in competition, command word, teamwork or care. Accepted institutions of distributive justice are essential to bring about effective cooperation. Only with their help can the expanded possibilities of voluntary cooperation be used economically without infringing on social objectives.

In the following essay, I will show that institutional innovations supporting high standards of social as well as economic equality are in fact the precondition for effective cooperation and, hence, for the efficiency of spatially or socially expanded labour markets. The socio-economics of cooperation deals with strategies that bring about the effective interaction of the main coordinating institutions of society -- markets, hierarchies, social networks, and civil rights. Whereas markets and hierarchies have received due attention during recent decades, it is still not well known how they are effectively to be combined. In addition, social networks and civil rights have been neglected or not properly dealt with. Institutionalizing values of justice beyond the economic principle of equity (fairness and proportionality) through the principles of equal treatment and solidarity that underlie social networks and civil rights is crucial, however, if socially as well as economically effective cooperation in enlarged societies is to be established.

Section 1 sketches the challenges caused by the external (spatial) as well as internal (social) extension of the cooperative framework; section 2 recalls strategies of effective cooperation from an evolutionary point of view; section 3 evaluates the alleged "big trade-off" of equality and efficiency, explains the employment relationship in terms of transaction costs, and extends the model by a third dimension; section 4 demonstrates actual and potential equality with efficiency measures in the areas of wage determination, equal opportunity policy, and income protection for the unemployed; section 5 summarizes the results.
1. Challenges in the 1990s: The New Cooperative Context

The challenges to social cooperation come from three main sources in a world of increasing uncertainty and conflict: (1) asymmetric migration caused by the opening of national border or by the struggle for sheer survival; (2) preference changes accompanied by the rise of unrealistic expectations as paradoxical consequences of the increasing speed and the overall access of information; (3) rising contingencies of labour supply especially through the breakdown of traditional family ties, their conversion into looser social networks, and the irresistible (from a normative as well as from an empirical point of view) demand of women to become equal partners in the market game. I consider briefly the impact of these changes on the cooperative context of the labour market.

1.1 The Spatial Extension of the Cooperative Game

The completion of German unification is a good illustration of the challenges of new migration movements. For the West German labour market, the few months before and after the fall of the Berlin Wall on November 9, 1989, brought about an additional labour supply of approximately half a million Germans ("Übersiedler") resettling from the eastern to the western part of the country. Both these and the subsequent migration streams after unification were extremely asymmetrical, with the younger and more highly skilled workers emigrating or commuting to work in West Germany and the older and less well qualified staying at home. With conditions rapidly becoming critical on the labour markets of the five new federal states (Länder) in 1991, some 300,000 commuters to the

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2 The number of registered unemployed in the former GDR almost doubled within only half a year from 445,000 (Sept. 1990) to 801,000 (March 1991); the figure rose to 1,290,000 in February 1992; in addition 519,000 are on "short-time work"; women - whose labour force participation rate with about 90% had almost equalled that of men - are especially hit by unemployment. The number of employed decreased from 9.9 to 6.7 million. Without measures of active labour market policy, the unemployment rate (16.4 % in February 1992) would be at a level of around 35 %. The ministry of finance estimates - in an internal memorandum - that only 20 % of the industrial working places will survive in the former GDR. Under the optimistic assumption that real growth of GDP will increase
western German states are to be expected (as opposed to a small number of commuters out of the western states), along with 350,000 "Übersiedler". Is it possible to arrest this process and avoid an osmotic emaciation of the regions in the former German Democratic Republic?

"Perestroika" has opened the borders for another population group. In 1987, 78,200 ethnic German immigrants were admitted to the Federal Republic, with 202,800, 377,100 and 397,000 more in the last three years respectively; at least 300,000 are expected in 1991. How long will this stream of additional labour from eastern European countries continue to be absorbed with relatively few problems, and what are the alternatives to migration? Beyond this, the flow of people seeking political asylum is growing. Official statistics reveal that 57,000 such people registered in West Germany in 1987; and the figures have climbed to 103,076, 121,318, and 193,063 in the last three years. Although many of these refugees are denied asylum and few are ultimately permitted to enter the German labour market, they represent, as it were, the advance delegation of a vast global majority who would like to participate in the prospering labour market of a small global minority. There is also the pressure that the non-German population of eastern Europe will exert in the East, the pressure to cross the remaining national frontiers. Is "perestroika" opening those borders as well? Will the River Oder even become the Rio Grande of Europe?

Other sovereign territorial boundaries will fall at the end of 1992 with the completion of the Single European Market within which, in both theory and practice, all inhabitants will be able freely to choose their place of work and residence. The only exceptions will be foreigners not belonging to the EC; they will temporarily remain subject to the various national regulations. Will the various established national standards for wages and salaries, wage compensation during short-term disability, unemployment benefits, protection against unfair dismissal, and the right to further training or to parental or nursing leave be adjusted to conform to the lowest standards in each sphere? Or will the rich countries impose

by a yearly rate of 9%, the productivity of the former GDR regions will have reached the level of 50% of West-Germany in the year 2,000.
their higher social standards, thus reducing the cost competitiveness of the poorer countries?

1.2 The Value Extension of the Cooperative Game

Brutal borderlines (walls and barbed wire), sovereign borders (customs barriers and national currencies), and political boundaries (dictatorial regimes) are not the only ones that are falling. Technological change is sweeping away barriers that used to limit the scope and speed of information and, hence, changing the character of communication. Ever greater amounts of, and access to information and the acceleration of its dissemination is likely to be the prime driving force behind further breathtaking "frontier crossing". This will have the effect of reducing mental and cognitive constraints, with the result that more and more values, needs, and ways of interpreting reality will be competing with each other. Are we able to institutionalize an even greater diversity of working and living styles, or are valuable cultures succumbing to the increased competition only because they do not prove to be efficient here and now?

By breaking down the barriers created by nature, science and technology has shown us not only more freedom but new limits as well - the finiteness of energy sources and the limited capacity of the environment. The revolutionary wave in Eastern Europe and elsewhere could, paradoxically, demonstrate just as impressively the limits of social growth or even reverse the social progress achieved by the welfare state. We have been used to congested traffic for a long time; will we have to become accustomed to "congestion" on the labour market as well? In other words: will we have to get used to long lines for "good jobs" (and respective idle capacities) and lack of labour for "bad jobs"? Or will the problem be "solved" by increasing income inequalities which enable the rich to buy cheap services by forcing the poor into low paid service jobs?
1.3 The Social Extension of the Cooperative Game

Last but not least, we are facing a basic social change towards the gender-neutral family. The family seems to be the last resort of status-related inequalities by allocating family tasks according to sexual differences, i.e., in accordance with innate, unchangeable characteristics. From the labour market point of view, the traditional labour division in social reproduction creates unequal opportunities in the competitive game for market income. There is overwhelming empirical evidence that gender-specific wage differentials, occupational segregation by gender, the compression of women in low-skilled, dead-end or precarious jobs is mainly caused by the unequal distribution of family tasks, and not, for instance, by open discriminatory behaviour. At the same time the opening of cultural boundaries through, for example, the liberalisation of sexual behaviour and divorce laws, plus the "second renaissance" of (increasing) individualism will also lead to new uncertainties and conflicts. Will we be able to avoid the already visible trend of the feminisation of poverty and the often traumatic as well as economically disastrous consequences of family break-downs for children through better coordinating institutions that support both justice and economic well-being in families?

1.4 Towards a New Balance of Equality and Efficiency

Without institutional innovation, the increased uncertainties and conflicts through the enlarged context of cooperation will intensify old and create new economic and social inequalities - including high, persistent and unequally distributed unemployment. The increasing importance of internal labour markets and the concentration of investment in firm-specific human capital is another trend that can be interpreted as a rational reaction by strong market actors to increasing uncertainty and

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3 "Gender" refers here to the deeply entrenched institutionalization of sexual differences, and a "gendered" family means the distribution of responsibilities, roles, and resources in the family not in accord with principles of justice or with any other commonly respected values, but in accordance with innate differences that are imbued with enormous social significance; see, e.g., Moller Okin 1989:6,22.
conflict. Here, as in many other cases, the danger is that the "cooperative rent" goes only to the "insiders" at the cost of the "outsiders" under the existing institutional regimes. What is called for is a new balance between the main coordinating institutions of society—markets, hierarchies, networks, and civil rights—to secure a complementary relationship between equality and efficiency, i.e., effective social cooperation.

A labour market with nearly complete freedom of movement within Europe's borders poses the question of what the institutional conditions are for the establishment of enduring and socially advantageous cooperation between a widened circle of "players" whose economic and social contexts are very unequal. The same question can be asked related to the expansion of the labour market's socio-political space. A primary condition for effective cooperation is that people engaged in cooperation feel treated in a "just" way. Certainly, principles of justice are primarily ethical, humanitarian norms requiring no further justification. But social action oriented on such principles depends upon appropriate institutions.

In the search for suggestions as to how such institutions can be structured, I commence by looking at some insights of evolutionary theory to the problem of cooperative competition. Subsequently I turn to the equality-efficiency conundrum, suggesting a solution based on an extended version of transactions cost theory.
2. Effective Cooperation In Evolutionary Perspective

The consequences of opening the field for more players is a central topic of evolutionary theory. One alternative common in biology - that the existing players in the game kill the newcomer or vice versa - is certainly not a model for a civilized society (although, unfortunately, it happens daily). What we are interested in is how cooperation to the benefit of all can arise in an extended competitive context. Three approaches seem to provide more than just stimulating thoughts: the sociological theory of civilization, the game theory of cooperation, and the theory of competitive advantage. I shall look briefly at each approach and summarize their basic ideas.

2.1 The Evolutionary Theory of Civilization

Attaining external freedoms by transcending physical and material limits is, according to Norbert Elias (1982), possible only through a growth of internal constraints, like the taming of instincts by social norms and new centers of social integration and coordination. Border openings reduce the dependencies within the former borders and, by broadening "exit options," provide for a more equal distribution of opportunities to acquire and exercise power. In return, however, people are woven into spatially and temporally longer chains of interdependencies, which for the individual constitute functional contexts that are less and less controllable. The larger playing field and greater number of possible partners in the game thus mean that people who are functionally interdependent in this way become more dependent at many levels on the efficiency of coordinating institutions.

Seen very abstractly and in terms of the labour market, this means that the freedom of movement and choice gained through border openings must be flanked by new, broader regulatory mechanisms of wage formation, social security, and vocational education or training in order to convert the acquired potential for cooperation into higher real income as well as more equitable income structures.
2.2 Evolution of Cooperation in Game Theory

An example of game theory is Robert Axelrod's (1984) fascinating book about the evolution of cooperation. It teaches us that whenever territorial borders or social borderlines open, the danger of ruinous competition increases for as long as there are no common rules or equal chances for cooperation within the widened circle of players. Furthermore, effective cooperation requires the "shadow of the future", that is, an awareness by the cooperating partners that they will be dealing with each other in the future as well. If traditional ties like kinship or neighbourly relations do not suffice to cast this shadow, then it is necessary to take institutional precautions such as the obligation to pay into a universal system of unemployment insurance or to announce mass dismissals in advance, to mention just two examples.

Competitive cooperation under an evolutionary perspective is, therefore, not characterized by the survival of individual successful persons but by the rapid mutual learning and imitation among rival, and potential by or actually cooperating partners. It is not competition with the objective of permanently driving out or even destroying the opponent but competition with the objective of repeatedly measuring one's strength. Playing with strong and changing partners is stimulating and keeps one alert; playing with weak partners is frustrating and lulls one to sleep. In the socio-economic game, of course, strong partners will tend to exploit the weak by wielding their power. The message, however, is clear for both cases: If the partners are weak, their playing strength must be increased by improving their educational, technical and social skills; in the case of the long-term unemployed, for example, the main remedy is simply to provide opportunities to participate in the market game.

4 Karl Deutsch's definition of power as the ability not to have to learn fits well into the game theoretical framework (Deutsch 1966:111).
2.3 The Economic Theory of Competitive Advantage

The institutionally oriented business economics of recent years empirically substantiates the strategic rules of game theory. In a widely noted book on the competitive advantages of nations, Michael E. Porter (1990) states that the only plants, regions, and countries to prevail in international competition in the long run are those surrounded in their immediate vicinity by strong partners that are simultaneously rival and cooperating. Regional comparative studies, both intra- and international, show also that prosperous regions or the successful restructuring of traditional industrial regions depend on a "dense" network of autonomous plants that are embedded in a well-developed social and public infrastructure (Grabher 1990).

To sum up, evolution needs time. To integrate and reorganize societies is a complicated process of interlinking that cannot be effected in a "heave-ho" approach like a political revolution. To be sure, there is no blueprint for the transformation of societies. Nevertheless, strategies are discernible, principles of action by which the evolutionary process admittedly cannot be controlled -- while it can be influenced in its direction and speed. We must create the conditions for a dynamic socio-economic balance analogous to nature's dynamic ecological balance.

A fundamental prerequisite for that is social cooperation governed by principles of justice. New coordinating centres in organizational as well as in normative terms, the "shadow of the future", and a wide variety of competent players have to be institutionalized. Another important condition for effective social cooperation is the governance of exchange relationships by civil rights (and their corresponding civil obligations). This means, in the first place, the endorsement of egalitarian standards in situations that require team-work, mutual trust and respect. Second, the provision of social security and/or public services to complement equity standards in competitive situations: if the players change partners for reasons of higher returns of exchange and if the capacity of reciprocal exchange is diminished for various reasons outside the domain of individual responsibility, solidarity must be available to compensate for the willingness to assume risks. Such cooperation with "weak ties"
(Granovetter 1973) will be stable the more it generates both equality and efficiency. Thus, I turn now to the institutional conditions of equality with efficiency.
3. The Remarriage of Equality and Efficiency

A good starting point is the seminal work "Equality and Efficiency. The Big Tradeoff" by Arthur Okun: "We can't have our cake of market efficiency and share it equally." (Okun 1975:2) The reading of this famous essay is not only illuminating but gives also great pleasure. It is obviously an elaboration of an earlier article by James Tobin who criticized the attitude common of mainstream economists to separating allocation from distribution, themselves concentrating on questions of allocative efficiency, while distastefully and arrogantly leaving equality to politics. One example is Henry Simons of the "Chicago School": "It is urgently necessary for us to quit confusing measures for regulating relative prices and wages with devices for diminishing inequality. One difference between competent economists and charlatans is that ... the former sometimes discipline their sentimentality with a little reflection on the mechanics of an exchange economy." (Simons 1948: 83-4)

Tobin, after a little more reflection, came to the conclusion that instruments of redistribution are not neutral in their allocative effects. He saw even the case - which I will emphasize later - for policies to reduce unequal income distribution before taxes and transfers. These policies "include removal of those barriers to competition ... which protect some positions of high wealth and income. They include efforts to diminish inequalities of endowment of human capital and of opportunity to accumulate it." (Tobin 1970: 276) Tobin recommended also non-market egalitarian distributions of commodities essential to life and citizenship in case of inelastic supply. This argument is of special interest if one considers employment not only as instrumental for earning wages but also as instrumental for "psychic income" and as an essential means of developing self-respect and sociability.

As soon as one accepts the interdependence of allocative and distributive measures, the equality-efficiency relationship becomes much more intricate. It is largely owing to Okun that we have at least some guidelines for moving in this labyrinth. Before entering, some definitional considerations may be helpful as a sort of "Ariadne’s Thread".
3.1 Equalities and Efficiencies

3.1.1 Equalities

Who is to be equal to whom with respect to what, according to which approach, to which values, and to what extent? Not less than five dimensions lurk behind the suggestively simple normative idea of equality. This is probably the reason why most people restrict the treatment of this problem to mere confessions or to utterly simplified conceptions - e.g., equal opportunity versus equal results. The complexity of equality may also be one reason for the discrepancy of widespread egalitarian ideologies and persistent inequalities. It is the merit of Douglas Rae and his collaborators to have started to develop a "grammar of equality" which every serious discussion on equality now has to take into account (Rae 1981). It will probably take decades for to become this grammar natural practice. In addition, unfortunately, the grammar does not always intuitively appeal, and - alas - is still underdeveloped. The main deficit is the missing link between equalities and social perceptions or valuations. Considerations of equity or justice, however, play a prominent role in labour markets as will be explained later.

Equality splits - according to Rae - into five distinct notions, each an element in its grammar: Equality's subject (1) may be individual-regarding, bloc-regarding or segmental; its domain (2) may be straightforward, marginal, or global; the approach (3) to the realization of equality may be direct (equal results), or may be a version of equal opportunity (which in turn may equate means or prospects); the underlying value (4) of equality may be based on uniform lots or on lots equally accommodating differences; and finally, the distribution principle (5) may be absolute or relative, (and if relative, based on at least four different criteria: maximin, ratio, least difference, and minimax). Without taking into account further possible differentiations, the five grammatical components yield three subject structures, three domain types, three treatments of opportunity and result, two value structures, and two main outcomes of the absoluteness-relativity distinction. In generating combined types, these terms multiply with one another, yielding
$3 \times 3 \times 3 \times 2 \times 2 = 108$ structurally distinct interpretations of equality (Rae 1981:132-3).

These distinctions must be combined with one another if equality is to be given flesh. The combinations may converge but may also be mutually exclusive. The illustrative example in figure 1 may provide both an impression of the grammar's usefulness and complexity:

Fine distinctions are certainly analytical assets, but for strategical reasoning and communication some simplification is necessary. The "equality grammar", however, enables us to select a set of relevant combinations without losing too much complexity. In the field of labour economics, we usually make reference to individuals as subject of equality; and with respect to the domain of equality we tend to think on total disposable income and not only of the margins; due to the necessity of investment, a straightforward distribution shall be excluded, too; finally, concerning the value structure, I assume the "person regarding" criterion - i.e., taking account of individual differences - to be relevant. In other words: In selecting the relevant combinations of equality, I submit to concentrate on distributional rules (absolute versus relative equality) combined with two approaches to equal opportunities (equal means versus equal prospects); the direct approach to equality - examples would be the enforcement of employment quotas or the prohibition of wage increases - is generally incompatible with a social or free market economy and shall therefore be excluded. This procedure generates four relevant types as shown in figure 2:

5 According to Burgess/Nielsen (1974) we would come up with a comparable typology based on the combination of effort (input) with outcome:

<table>
<thead>
<tr>
<th>INPUT</th>
<th>unequal</th>
<th>equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>unequal</td>
<td>equitable if</td>
<td>redistributive</td>
</tr>
<tr>
<td>proportional</td>
<td></td>
<td>(in-) justice</td>
</tr>
<tr>
<td>equal</td>
<td>distributive</td>
<td>equitable if</td>
</tr>
<tr>
<td>(in-) justice</td>
<td></td>
<td>egalitarian</td>
</tr>
</tbody>
</table>
The sequence of equality choices (see vertical line) is the selection of a segmented subject (1); only a marginal domain shall be equally distributed (2), further restricted by equality of means (3); persons' value differences in the segment shall be regarded (4), and the distribution shall not end in absolute but only in relative equality (5).

A labour-market example could read in the following way: Only male full-time workers (1) get profit shares (2) and the same amount of further training (3); their shares are related to their personal needs, e.g. family status (4), but shall respect the minimax/maximin-criterion (5).
Figure 2: Relevant Equalities in Labour Markets

<table>
<thead>
<tr>
<th>EQUALITIES OF (WAGE) INCOME</th>
<th>RELATIVE (b)</th>
<th>ABSOLUTE (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTRIBUTIVE JUSTICE (Equity)</td>
<td>MEANS</td>
<td>Redistributive Justice</td>
</tr>
<tr>
<td>EQUALITY OF OPPORTUNITY</td>
<td>PROSPECTS</td>
<td>Equal Opportunity</td>
</tr>
</tbody>
</table>

1. Distributive Justice (Equity)
   (a) Individuals are endowed with equal means of attaining labour-market productivity (e.g. basic education) assuming no discrimination;
   (b) the allocation of wages follows certain principles of distributive justice related to labour input or effort, in other words: »equity«.

2. Redistributive Justice
   Equality of opportunity same as 1 (a);
   (d) market income differentials are compensated by transfers according to standards of absolute equality assuming person-regarding value structures.

3. Equal Opportunity
   (c) Individuals are endowed with unequal means, the differentials aimed at compensating for pre-market disadvantages, earlier discrimination or differences in natural endowments (e.g. compensatory education, means-tested students grants, day-care centers for dependent children);
   wage allocation same as 1 (b).

4. Egality
   Equal opportunity same as 3 (c);
   wage allocation same as 2 (d).
Two main conclusions come out of this exercise one conceptual, and one speculative. First it becomes clear that equity - often used synonymously with equality - covers only "one corner" of the equalities' dimensional space. Under the equity perspective, equality mirrors only the balance between input and output considered by cooperating partners as fair. Equality converts into proportionality between investment and return relative to others, thus pinching off the utopian touch of absolute equality (Lautmann 1990:43). Although equity considers the results of cooperation, equity and (other dimensions of) equality may vary independently from each other (Burgess, Nielsen 1974:428). The equity principle, as William J. Goode remarks without illusion, establishes a rule of inequality although introduced as principle of equality. It mixes egalitarian and differentiating principles in a strange way, and its persuasive power is largely due to rhetorics (Goode 1978:350).

Second, the relevance of the four main types of equality seems to vary contextually. The guiding hypothesis may start with the following speculation: equity or distributive justice is relevant when both supply and demand on the labour market are elastic; redistributive justice is relevant when supply is elastic and demand inelastic; equal opportunity is relevant when demand is elastic but supply inelastic; finally, egalitarian relationships are relevant when both supply and demand are inelastic. The context-specific transformation of the equality typology thus looks like figure 3:

**Figure 3: Relevance of Equalities in Context**

<table>
<thead>
<tr>
<th>DEMAND</th>
<th>ELASTIC</th>
<th>INELASTIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPPLY</td>
<td>ELASTIC</td>
<td>Distr. Justice (Equity)</td>
</tr>
<tr>
<td></td>
<td>INELASTIC</td>
<td>Equal Opportunity</td>
</tr>
</tbody>
</table>

17
The overall elasticity case, obviously, fits with perfect market conditions: Equity may be achieved if scarcity (i.e., the necessity of optimizing resource allocation), full information, mobility of resources, and competition are given. Group sociology and economic psychology seem to support this hypothesis: Equity principles are preferred to egalitarian principles when social groups are confronted with external and instrumental problems such as adjustment to changes and goal attainment, and also when efficiency considerations determine group organization and resource allocation. Thus, in cooperative relations in which economic productivity is a primary goal, equity rather than equality is the dominant principle of distributive justice (Deutsch 1975: 143). The new sociological functionalism even sees outcome distribution according to performance ("Leistungsgerechtigkeit") and corresponding inequalities as a necessary condition for attaining and maintaining the flexible and innovative capacities of social systems (Hondrich 1984:290f). Egalitarian principles, on the other hand, are dominant in situations of internal and expressive problems (group cohesion, solidarity). Further contextual conditions of equality choices have been found in time constraints, transaction or bargaining costs, and in one-time or repeated exchange relationships (Lautmann 1990:62; Yuchtman 1972:592f). Economic psychology even suggests gender-specific preferences of choices: equity being a typical "male", (absolute) equality a typical "female" choice (Kahn et al. 1980:176-188).

In a context where supply is elastic and demand inelastic, redistributive justice may be necessary to avoid or to compensate for monopoly rents related to "positional goods" such as hierarchical positions in the labour market. Although there are no strict limitations to such positions - there is probably more scope to reduce hierarchies as presently realized -, the limited number of "good jobs" is a structural feature of real labour markets. To allow unrestricted competition or to invest more into equal opportunities would induce a rat race and be economically a waste of resources.

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6 This is a marker for further research. The following points are partially taken up in section 3.3, when I extend the transaction cost model.
When labour demand is elastic and labour supply inelastic, however, then we have a clear case for equal-opportunity policies. Such policies could compensate for inelasticities such as family obligations (eg by providing day care centres, paid parental leave), or they could do away with the determinants of elasticities (eg by improving the public transport system, raising skill levels).

Inelasticity on both sides of the labour market, finally, represents the outstanding - but not necessarily the only - case for egalitarian policies in terms of both allocation and distribution. Job guarantees via temporary public job creation at prevailing market wages, or a means-tested basic income guarantee may be examples.

3.1.2 Efficiencies

To my knowledge, no "efficiency grammar" has yet been developed. Many terms, however, are flying around and are often used to suit a particular purpose: Pareto efficiency, static efficiency, dynamic efficiency, etc; even concepts of social efficiency and political efficiency have been suggested (Schmitter 1990:29) although waiting for "warming clothes"; and a number of terms are related to efficiency such as competitiveness, high performance, productivity, efficacy, effectiveness, and so on.

Time and space place limits on our discussion of this issue. Thus, let me start immediately with a simplification, taking Okun's definition of economic efficiency as the maximum output (of goods and services) from a given input (of labour and capital). Note, however, that this definition leaves out, eg, the domain of input utilisation, ie, whether only the most productive workers, or whether the entire population of working age should be included in the definition of input. In place of a discussion of the implications of this definition, I will merely add a proposal, conceived in analogy to the "equality grammar", for distinguishing four types of labour market efficiency:
3.2 Contingencies of Equality and Efficiency

Why should (relative) economic equality, i.e., small disparities in families' disposable income affect economic efficiency? The underlying assumption in standard neoclassical economics is simply that markets generate differential income according to differential inputs by individuals and to the valuation of the output by the market. Differential inputs depend on acquired assets, natural abilities, and efforts that determine together the individual's level of productivity; the valuation of the output reflects the tastes of the consumers as well as the production decisions of others (law of supply and demand). Because the rules of the game are the same for all, the differences in outcome are viewed as fair as long as every loser has the chance to change his or her decisions according to the market signals so as to be a winner in the following rounds. On these assumptions, any intervention to redistribute market income must lead to a reduction of efficiency almost by definition. Efficiency losses arise mainly through reduced work efforts, disincentives to private saving, and administrative costs of redistribution or—in other words—through the famous "leaky bucket" (Okun 1975:91ff).7

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7 For a systematic evaluation of efficiency losses and efficiency gains through redistributive measures see Haveman 1988:46-49).
Okun, however, was well aware of the difference between economic equality and equality of opportunity. In fact, he devoted a whole chapter (out of four) to the ways in which civilized societies promote equality (and pay some costs in terms of efficiency) by establishing social and political rights that are distributed equally and universally and that are intended to be kept out of the market place. Contrary to extreme libertarian views, he recommended restricting the market clearly to its proper range of economic issues: "The imperialism of the market's valuation accounts for its contribution, and for its threat to other institutions. It can destroy every other value in sight. If votes were traded at the same price as toasters, they would be worth no more than toasters and would lose their social significance." (Okun 1975:13) We will have to come back to this conclusion because people value jobs not only in economic terms (ie, market income) but also in social terms (ie, psychic income).

Okun was also conscious of complementary relationships between equality and efficiency and did not assume - as many mainstream economists persist in doing - the universal applicability of the trade-off: "Measures that might soak the rich so much as to destroy investment and hence impair the quality and quantity of jobs for the poor could worsen both efficiency and equality. On the other hand, techniques that improve the productivity and earnings potential of unskilled workers might benefit society with greater efficiency and greater equality."(Okun 1975:4)

The latter possibility has been poignantly reformulated and extended in a more recent work as the "opportunity based vision of a handup and not a handout" (Haveman 1988). In his informative and stimulating book "Starting Even", Haveman criticises the old-style welfare state that attempted to offset competitive handicaps primarily by redistributing market outcomes. The United States was particularly consistent in pursuing this maxim. Looking back on the last forty years, however, Haveman finds out disappointingly that progressive tax rates and, in particular, increasing transfer payments were only ever able to neutralize the growing economic disparity before taxation and transfer payments. He claims that nothing has changed with regard to the unequal distribution of disposable income. It has also been shown theoretically that increasing redistribution of disposable income does lead to more equality but at a lower average
standard of living (Baumol 1986). Haveman shows that "equality cum efficiency" measures are possible, especially if the equalizing policy is focused on opportunities instead of on outcomes, eg, by the improvement of technical and social skills of the working poor.8

Okun also stressed the potential economic value of equality of opportunity: "Whenever trading decisions in the marketplace are influenced by the personal characteristics of buyers and sellers as distinct from the quality and characteristics of the products they wish to deal in, that market generates an inequality of opportunity as well as an economic imperfection. Consider, for example, cases where job opportunities are influenced by race and sex. These may involve poorer pay for a given job - exploitation - or exclusion from the good jobs. When a women gets as good a job as a man with equal skills would obtain but is paid less, the exploitation creates unjustified inequalities; but it may not have much effect on efficiency, at least in the short run. On the other hand, if women are excluded from responsible jobs, they are prevented from using their skills to the fullest extent; that is inefficiency - in effect, the worker's hand is tied behind her back. The empirical evidence identifies exclusion as the main form of discrimination in labour markets. It produces a triplet of evils: unequal opportunity, unequal income, and inefficiency. Moreover, unequal opportunity at one point in time generates unequal opportunity over time. Once people are excluded from good jobs, they are deprived of the incentives and opportunities to develop the skills that would otherwise qualify them for good jobs." (Okun 1975:77) Another evident source of economic inefficiency is the unequal access to, in particular, the higher education system (Okun 1975:81).

Unequal treatment may also result in an inefficient allocation of resources. Where, for instance, equally productive men and women are hired for different jobs and women's jobs are lower paid due to occupational segregation, prices do not serve as accurate indicators of

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8 Haveman, writing in the U.S. context, suggests five major provisions for an equality cum efficiency strategy: an income safety net, a minimum income in retirement, a national child-support program, an employment subsidy to increase jobs for low-skill workers, and a capital account for youth to equalize start-up opportunities (Haveman 1988:24, 149-177).
social costs. In comparison to the non-discriminatory situation, society produces "too little" of the outputs that use "overpriced" male labour, given that equally productive female labour is available at a lower price to expand production. Society produces "too much" of the outputs that use "underpriced" female labour, given that the contribution of equally productive labour is valued more highly in the male sector. The public sector may be a candidate. Inefficiency caused by discrimination is even greater when taking into account feedback effects. If women are deterred from investing in their human capital because of discrimination, society loses a valuable resource. Thus, opening doors to women that were previously closed (or only slightly ajar) benefits society as well as individual women by bringing their talents and abilities to bear in new areas (Blau/Ferber 1986:262-3).

From a game theoretical point of view, Schotter adds a further argument against wide differentials of rewards: Excessive differentials between market outcomes may be considered as unfair affecting work incentives. "An 'efficiently organized' economy may define outcomes that a substantial portion of the population may consider unfair. Those people that do relatively well under the existing set of institutions may have an incentive to work hard, but those who do poorly may become discouraged and stop trying. Now, contrast this situation with an 'inefficiently organized' economy that the overwhelming majority consider to be fair. If this sense of fairness increases the effort of the previously discouraged population to a point where the average effort of workers in the economy is increased, then this 'inefficient' but equitable set of institutions may produce a greater output than the 'efficient' economy. Hence, if people think they are playing a fair economic game and this belief causes them, on average, to try harder, equitable economic institutions may turn out to be efficient as well."(Schotter 1985:30-1)

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9 These costs may be significant as, eg, the Canadian Task Force reports: By increasing participation and eliminating misallocation of women's labour force, gross domestic product per person in Canada would be 20% higher by 2006 than it would be if present trends continue. Removing discrimination alone (without accelerating participation) would increase output by 10% (Beneath the Veneer 1990, Vol. I:116).
Finally, a remark on the analogy of games theory: a labour-market game differs from sporting games in one essential element at least: most players on the labour market have to play, whereas sportsmen and women can choose the game with rules that best suit their talents. Thus, on the labour market the rules of the game have to be adjusted to (many) players, whereas in sport it is the players who have to adjust to the rules.

As the above considerations show: there is no necessary trade-off between equality and efficiency; the relationship is contingent, as shown in figure 5. It depends on the problem and on the efficacy of coordinating institutions whether the "marriage" of equality with efficiency develops into a harmonious and mutually productive liaison or into a vicious circle that may end in disaster in a process reminiscent of marriage scenes by Virginia Woolf. The most promising candidates for a "virtuous" relationship seem to be measures enhancing earnings capacities, providing equality of employment opportunity, supporting a wage structure considered as fair, and providing income security to cover risks or uncertainties.

Two questions, however, remain to be answered: Which institutions and which institutional mixtures promise to support such a "virtuous marriage"? How far shall we go with (which) equality-promoting measures at the cost of (which) efficiency? An extended transaction cost perspective will be used to illuminate the first question, while the second question will be discussed using theories of justice or injustice.

3.3 Institutions in an Extended Transaction Cost Perspective

An excellent clarification of the comparative efficiency of institutions has been provided by William G. Ouchi. His article "Markets, Bureaucracies, and Clans" (Ouchi 1980) is especially helpful due to links it establishes between transaction costs and equity issues in the employment relationship. It takes explicit account of the fact that the exchange of labour against wages is often different from the exchange of marketable goods and services or capital.
Figure 5: Contingencies of Equality & Efficiency

I  The "classical tradeoff"
II  The "vicious marriage"
III The "neo-classical tradeoff"
IV  The "virtuous marriage"
Ouchi assumes that individuals evaluate transactions (or exchanges) according to socially accepted standards of reciprocity. It is this demand for equity which brings about transaction costs. "A transactions cost is any activity which is engaged in to satisfy each party to an exchange that the value given and received is in accord with his or her expectations" (Ouchi 1980:130). Transaction costs arise principally when it is difficult to determine the value of the goods or services. Such difficulties can arise from the underlying nature of the good or service or from lack of trust between the parties.

According to this view, institutions developed for reducing transaction costs, or (in other words) for inducing cooperation by securing equitable exchanges. Markets are only efficient institutional devices if performance ambiguity between the trading partners is low, and if the content of exchanged goods or services reflects comparative advantages and different interests (goal incongruency); there is no market between equals in any respect. Clans developed as institutional solutions for the simultaneous occurrence of high performance ambivalence and high common interest (i.e., low goal incongruency); a typical example would be team-work in research projects. Bureaucracies are established, according to Ouchi, when both performance ambiguity and goal incongruence are moderately high.10 So far, so good. Something, however, is missing from a socio-economic point of view. Let me start with an example from the service market:

If I go to the doctor, I rely on the reputation and professionalism of that person and not (at least only to a small extent) on the price charged for the service. In other words: I rely on the efficiency of the social "network" (in term, Ouchi's "clan") called "the medical profession." I assume also that the price of the service is fair because it has been bargained between other social networks (say, the trade union and the doctors' association) or has been determined by another legitimized institution (a "hierarchy" or in Ouchi's term, a "bureaucracy") and is

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10 Ouchi did not clearly distinguish the three constellations of goal incongruency, congruency, and indifference. Clans (or networks, as I call them) require in any case a high degree of common interest and not only low goal incongruency, whereas bureaucracies or hierarchies are usually characterized by goal indifference.
essentially equal for the "same" service provided by different doctors. Or -
and this is the missing element in Ouchi's approach - I even don't bother
about the price because I am entitled to the service by some standards of
(absolute) equality without being charged personally. Nor will I search for
the cheapest doctor, simply because my toothache is so bad or because
wasting time could even cause death. Even if I had time for comparing
prices, the outcome in terms of efficiency would probably be worse. Due to
informational asymmetries, it might well be rational to choose the most
expensive doctor because the high prices of medical services presumably
will reflect high quality. Institutions that endow individuals with
entitlements (often, but not necessarily, legally enforced) according to
socially accepted standards of equality and independent of individual's
capacity to reciprocate shall be called "civil rights"; their exchange
medium is solidarity, whereas the well-known exchange media of markets,
hierarchies, and networks are money prices, power, and trust, respectively
(see figure 6).

Civil rights - in combination with markets, hierarchies, and networks -
are also an important institution governing the employment relationship.
If I work, say as a skilled worker at the VW assembly line in Wolfsburg, I
trust in the fairness of my wages due to the efficiency of the social network
of which I am a member (trade union or works council); I accept also the
authority (power) of the VW management (the "hierarchy") to relate my
remuneration properly to the wage of my boss or to less experienced (less
senior) colleagues, and that my wage is not significantly different to a
comparable colleague at Daimler Benz in Stuttgart; I expect, finally, to be
entitled by law to a fair (ie, proportional to my salary and relatively equal
to others) replacement of my wage in case of unemployment; in other
words: I expect civil rights backed up by solidarity.

Ouchi's approach - which is similar to Williamson's (1985) - is
summarized in figure 6, but extended by a third structural category of the
employment relationship to take into account an important (and widely
neglected) precondition of efficient market transactions: a high capacity
of reciprocity. A socio-economic approach, however, has to include the
type of transactions or exchanges that are not and cannot be governed by
the rule of "reciprocity". Such situations arise when individuals
Figure 6: Efficiency Conditions of Coordinating Institutions

<table>
<thead>
<tr>
<th>Performance Ambiguity (Uncertainty)</th>
<th>Markets</th>
<th>Hierarchies</th>
<th>Networks</th>
<th>Civil Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Moderately High</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal Incongruency (Conflict)</th>
<th>Markets</th>
<th>Hierarchies</th>
<th>Networks</th>
<th>Civil Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Moderately High</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reciprocity Capacity (Autonomy)</th>
<th>Markets</th>
<th>Hierarchies</th>
<th>Networks</th>
<th>Civil Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Moderately High</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

= according to Ouchi
(hierarchies = bureaucracies; clans = networks)

Regulatory Media

- Markets ---\(\rightarrow\) Prices
- Hierarchies ---\(\rightarrow\) Power
- Networks ---\(\rightarrow\) Trust
- Civil Rights ---\(\rightarrow\) Solidarity
are by nature, by accident or by social status incapable of reciprocal responses or only able to provide such responses in the long run (and this usually under high uncertainty). Inability to reciprocate is quite different from situations of performance ambiguity which assumes the possibility of reciprocity in principle. Coordination by some socialized and legally enforced ethic of solidarity, named "civil rights", is the only institution that can efficiently deal with such situations.11

3.4 Trade-off Choices in Theories of Justice and Injustice


It seems self-evident that the "justice" of equality is based on a value judgement. It depends especially on the decision whom we include in the evaluating balance sheet. The statement by Aristotle looks only at first glance plausible and innocent. However, as Armatya Sen for instance observed, the Athenian intellectuals discussing equality did not see any great problem in excluding the slaves from the orbit of discourse (Sen 1973:1). The same sort of neglect in theories of justice also affects women (Moller Okin 1989; O'Neill 1990).

Less clear is that efficiency itself is a value among others (Etzioni 1988:245-8). The evocation of a trade-off between equality and efficiency is already a concession that there may be a difficult choice of preferences, a concession that radical libertarians would not make. In addition, the seemingly neutral concept of 'Pareto Efficiency' is also highly dependent on who one includes in the concept of the society or community whose welfare one studies: Who is considered as a full member of the active labour force (c.f., the concept of "full employment")? Are married women with children included? Adults with physical handicaps but full mental faculties? Are future generations encompassed? If so, how long into the future? What about illegal immigrants and starving or suffering people in

11 The lack of reciprocity capacity (or the capacity to act independently) as a source of unfair social and economic inequality has been tackled from a philosophical point of view by Onara O'Neill (1990).
other countries? In practice, societies answer these questions in the institutionalised form that solidarity takes in each case.

In the following I abstain, however, from these larger questions. I shall restrict the discussion to economic equality and efficiency on the labour market, i.e., to wages, employment, unemployment and productivity. What then is the break-even point given a trade-off between equality and efficiency, and how can this point be shifted upwards?

Figure 7 displays intuitively several "break-even points" according to various theories of justice.\(^{12}\) The strict libertarian position would stop any equality-inducing measure at point L at which the trade-off is starting: Some efficiency would have to be given up in favour of equality by moving beyond this point to the left. This position - giving priority to efficiency - is clearly implied by Milton Friedman's discussion in Capitalism and Freedom (Friedman 1962:161-66).

The moderate libertarian (or utilitarian) would maximize both equality and efficiency according to the marginality principle: 'promote equality up to the point where the added benefits of more equality are just matched by the added costs of greater inefficiency.' This concept of equity would lead to the "break-even point" at U.

Another variant follows from Rawls's theory of justice based on two fundamental principles - the principle of equal basic liberty and the "difference principle" combined with the requirement of fair equality of opportunity. The second principle is relevant here. It insists that "all social values...are to be distributed equally unless an unequal distribution of any...is to everyone's advantage" - in particular, to the advantage of the typical person in the least-advantaged group (Rawls 1971:62). This view implies that no inequality is tolerable unless it raises the lowest income of the society. According to this "maximin criterion", society is worse off if

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12. Theories of "justice" are not, as one might assume, implicitly also theories of "injustice". The political scientist Judith N. Shklar made this point persuasively clear: "One misses a great deal by looking only at justice. The sense of injustice, the difficulties of identifying the victims of injustice, and the many ways in which we all learn to live with each other's injustices tend to be ignored, as is the relation of private injustice to the public order." (Shklar 1990: 15) How this suggestion affects trade-off choices will be considered in a later stage.
Figure 7: Trade-off Choices Between Equality and Efficiency

L,L' = strict Libertarian
U,U' = moderate Libertarian (utilitarian)
R,R' = Rawls Egalitarian
E,E' = strict Egalitarian
WU = "weighted Utilitarian"
ER'UU' = preferred range of New Equilibrium
the lowest-income family loses one dollar, no matter how much everybody else in the society gains. Following Rawls, we would end up at point C on the curve: Up to this point it would always be possible to increase someone’s income without necessarily reducing someone else’s income because there is still some gain in efficiency; above this point, however, someone would lose because efficiency becomes negative.\(^{13}\)

A radical egalitarian, finally, would put absolute priority on equality and go up to the point E when both equality and efficiency start to fall. This opinion probably fits with the majority of present-day economists who maintain that the welfare state has already reached something like the state at point E (or even further to the left). Their policy advice is to cut social transfers and to deregulate the labour market to come back to point L or at least to point U. Is that the only choice we have?

The discussion in the foregoing paragraph has already indicated possibilities to move the trade-off curve upwards. Reducing high long-term unemployment would alone probably make it possible to move from the paretian suboptimal point U to U'. The consistent application of efficiency-enhancing equity standards suggested above would exploit the area ER'UU' possibly allowing society to reach the new equity equilibrium point WU. This point reflects a “weighted utilitarianism” as advocated by Arneson (1990) and Weirich (1983). It represents a combination of Rawlsian and utilitarian principles, and gives more weight to securing gains and avoiding losses for the worse-off than for the better-off.

My justification for this choice, however, is not simply normative. It derives from the assumption that a relatively larger increase of reciprocity capacity - ie, the capacity of independent transactions (see the extended transaction cost model in section 3.2) - for the least advantaged on the labour market helps to move the trade-off-curve upwards. Weighted utility, hence, is at least compatible with efficiency (ie, increasing equality

\(^{13}\) Rawls position can easily be attacked by plausibility considerations. Assume an average yearly net income (full-time job) of 30,000 DM, and a range of 10,000 to 100,000 DM; an employment policy increasing the average to 40,000 and the range from 9,000 to 120,000 would not be acceptable under a Rawlsian justice regime. This would approximate to a move from R to U'. Intuitively, this doesn't appeal, because one could easily imagine a redistributational correction later on if the political majority wishes to do so.

32
will not shift the efficiency point to the left), and may even be complementary (i.e., increasing equality shifts the efficiency point to the right). The strategies to move into the preferred range of a new equilibrium, if possible to WU, instead of the path currently being pursued (E -- > R -- > U -- > L) will be discussed in the next chapter.

Figure 8 summarizes the main arguments so far in graphical form. Two feedback-loops in this representation have not yet been discussed: the judgement of the "equity balance" by the voters, and both the distributional and allocational incidence of taxation in its widest sense (including also contributions or payroll taxes). The shifting (and culturally varying) preference of voters regarding the choice between transfers versus job creation as measure to correct inequalities of wages and job opportunities is one aspect among others. Arneson (1990:1130) observes that even if cash grants worked more efficiently to boost the utility of disadvantaged persons than provision of employment, a program of state-guaranteed employment (through public works or wage subsidies for private job creation) might be more palatable to voters in modern democracies. Opinion surveys seem to show that the majority of citizens harbor grave qualms about the wisdom of a state policy of handing out unearned income to the able-bodied, while they support programs that offer employment opportunities to the able-bodied unemployed.

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14 The role of voting systems on "equality/efficiency choices" needs much more deliberation than the anecdotal observation that follows. In addition, I will touch only marginally on the role of the second feedback-loop, the revenue flow (or "taxes" in their broadest sense), in section 4.3. It does make a difference for the final outcome how equality or efficiency-enhancing policy measures are financed. With respect to the financing of unemployment insurance and active labour market policy see Schmid/Reissert 1989; Schmid/Reissert/Bruche 1992.
Figure 8

Political Economics of
EQUALITY AND EFFICIENCY

Exogenous Political Forces

Exogenous Market Forces

Political System

Labour Market

Combined Governance Regime
> Markets
> Hierarchies
> Networks
> Civil Rights

VOTING

Taxes

Participation
Occupation
Working Time

WAGES

Equity Balance

Equality

Taxes

Transfers

Efficiency

34
4. Strategies of Effective Social Cooperation

To sum up the reflections so far, effective social cooperation depends on several conditions: first, the existence of many autonomous persons with high capacities to reciprocate, in other words, a large number of competent agents is a precondition for the social engagement in competitive cooperation; the enhancement of this basic market condition is crucial if the playing field becomes larger and the players by origin more unequal.

Second, social incentives to cooperate, the type of which depends on the nature of transactions, either wage differentials (markets), transparent long-term career paths (hierarchies), professional reputation (networks) or a combination of all three.

Third, civil rights and corresponding obligations for care are a necessary (and often forgotten) complement where individual autonomy of action is lacking or severely restricted. These "caring" functions can take the form of basic income support, social security and employment protection, educational and social help for various kinds of risks during the life cycle (natural or social handicaps, unemployment, sickness, special family obligations, disability, family breakdown).

Our deliberations on the equality-efficiency puzzle, in addition, have brought another three conclusions: first, it may be worthwhile to consider more seriously equality-enhancing measures before redistribution due to "leaky buckets" in administering redistribution, but also due to adverse allocational effects of large scale redistribution; on the other hand, basic income support, fair wages and employment security may have positive incentives to work hard, to cooperate, and to shirk less.

Second, equal employment-opportunity measures, especially for new players entering the game, are the most promising candidates for a "virtuous marriage" between equality and efficiency. In the following it will be shown, however, that universal or all-encompassing measures are more appropriate and consistent with "comparative cooperation" than selective or targeted measures.
Third, income security, employment protection and active labour market policy - properly designed - still have an unexploited potential for creating equality cum efficiency.

In the following, I shall reflect on this pair of three conditions and possible strategies in more detail, although very much by way of a sketch.\textsuperscript{15}

4.1 More Equality Before Redistribution

"I don’t pay good wages because I have a lot of money; I have a lot of money because I pay good wages." (Robert Bosch)

"Beggars do not envy millionaires, though of course they will envy other beggars who are more successful." (Bertrand Russel)

The two main messages of this paragraph are represented by the above citations: first, low wages do not necessarily mean low labour costs; on the contrary; second, apart from a socially constructed (and therefore changing) consensus on a civilized minimum standard of wages and income, workers tend to evaluate economic equality by comparing themselves with their "social neighbours" and not with those at the top of the income scale. In the following deliberation of policy strategies, I elaborate on the two arguments separately.

4.1.1 A moderate but not modest wage policy

High wages can stimulate work effort, willingness to learn, to stay with the firm, and to cooperate in teams (among others Akerlof/Yellen 1986, 1990; Raff/Summers 1987). Evidence in the member states of the European Community shows that low wages tend to go hand in hand with low productivity, meaning that unit labour costs are often higher in low wage areas or industries than in high wage areas. Moreover, there is little evidence of close relationship between relative labour costs and

\textsuperscript{15} Drawing the portrait will be the task of a book.
competitiveness, as manifested, for instance, in the trade performance of the EC member states. Those countries experiencing the lowest rates of increase in unit labour cost have not necessarily expanded their share of intra-Community trade the most (Commission...1990:69). It appears also that the regions with the lowest wage levels tend to be those with the greatest employment difficulties (Commission...1991:122). The reason for this has been made clear: wages and other costs of production are only one element in the competitive process. Qualitative factors - like the design of a product, its reliability and performance, related customer services - can be equally if not more important and are likely to become increasingly relevant as real income grows and people can afford to become more selective and discriminating in what they buy.

Enhancing equality before redistribution thus means, among other things, that wage and income differentials that have become conspicuous in the extended European single market, especially those in the united Germany, are to be eliminated primarily by equalizing the gap in technical and social skills rather than by equalizing outcomes by transfers. Wherever possible, this specifically means avoiding, eg, the temporarily easy route of structural adjustment by extending the duration of unemployment benefits or by imposing early retirement. The more promising policy strategy is to enhance transaction capacities, such as improving the workers' skills through retraining and further training, and offsetting irremediable shortcomings in the skills of older employees or persons with impaired performance through shorter working hours or wage subsidies.  

This doesn't mean that any transfer policy is bad. Intermediate redistribution can make sense if the enhancement of transaction capacity needs some time. If monetary policy is not available to adjust for different productivity levels (as is the case in the unified Germany where the common currency meant practically a huge revaluation for the East German regions), functional equivalents have to be implemented. In the absence of mobility barriers between rich and poor areas (ie, high and low productivity areas), young and qualified workers will - at given huge wage differentials - move out of the poor regions and further deteriorate the attractiveness of the regions for investment capital. To prevent such a vicious circle, the moderate (but not modest) wage policy could be complemented by offering wage subsidies as a functional equivalent to the (now politically impossible) depreciation of the currency as proposed a long time ago by Nicholas Kaldor (1936). Such a policy, however, only makes sense if accompanied by massive investment incentives and the provision of public infrastructure.
4.1.2 Fair, but not egalitarian wages

Competitive labour markets are characterized by flexibility, that is, by high mobility or elasticity of labour supply. In principle, labour supply can acquire this property in two ways, by the spatial and temporal mobility of individual workers ("numerical flexibility") or by their versatility in terms of skill or intellect - ie, qualifications - at one and the same place of work ("functional flexibility"). Textbook wisdom attaches great importance to wages and their variation or variability to bring about both sorts of flexibility. As far as cooperative competition is concerned, however, wage variation is a necessary but not a sufficient condition for competitiveness.

An everyday example will illustrate this point. Responding to the proposal of a high-ranking East Berlin city council member for economic affairs, that the low wage level be used to enable East Germany to become as West Germany's "extended workbench," a small businessman from Potsdam pointed to the almost completely outmoded technology of GDR plants and the fact that the GDR's market had been taken over by western products. Moreover, he continued, many plants near the border area had already lost their best workers to firms in West Berlin or West Germany because of the wage differential. This businessman therefore maintained that it was an illusion to think that low wages were an advantage for Brandenburg plants.

From both the evolutionary and from the equity perspective of cooperative competition, the strategy of maintaining low wages and large wage differentials must be criticized. It is not price competition that plays the decisive role in models based on evolutionary theory; it is competition based on both process and product innovation. In process-oriented innovation competition, firms use more cost-effective production procedures in an attempt to gain a cost advantage on their competitors. In product-oriented innovation competition, firms create new products and achieve better quality in order to gain a temporary monopoly, increase their sales at the expense of their competitors, or recoup sales losses they themselves might have suffered. Most research on the impacts of new technologies on the labour market has shown impressively that the availability of a work force whose qualifications allow for flexible
deployment is a key prerequisite for gaining a foothold in innovation competition (Matzner/Schettkat/Wagner 1990; OECD 1988; Schettkat/Wagner 1990). It is particularly noteworthy that the most innovative sectors managed to develop this necessary flexibility not primarily by exchanging parts of the labour force with the external labour market but mostly by reassigning workers internally. The willingness of the workers to accept structural change, allow themselves to be assigned new jobs, or acquire additional skills increases with job security—which admittedly has to be made contingent on this willingness—and with remuneration that is felt to be good and equitable. Wages, too, have to be guided more by functional than by numerical principles, that is, more by actual performance centred on skill and cooperation than by age, seniority, or rank. The most innovative sectors have both the greatest expansion of employment and the least risk of unemployment.

Other reasons also favour the strategy of taking the moderate high-wage policy's function of promoting structural changes and combining it with elements that retard the emergence of large wage differentials. The greater the range of wages, the less likely it is that members of high-wage sectors will allow themselves to be forced into a low-wage sector or into a function that is usually paid less. Even the productivity growth of manufacturing and service industries, which is unequal for technological and organizational reasons, speaks against the existence of a close tie between wages and numerical productivity growth. Otherwise, we would have long since been lacking teachers, hairdressers, nurses, and other providers of personal services, for whom there is little or no chance of productivity growth, at least not at the rate possible for the capital-intensive production of goods.

If productivity ultimately depends not only on individual performance but on cooperation as well, then considerations of incentive and justice speak against excessive wage differentials. Information theory and learning theory have long recognized the significance that "tacit knowledge" has for high productivity and competitiveness. That is the knowledge that comes from experience, knowledge that, in a sense, is contained in people's hands and minds, not in reference manuals or textbooks. Working people will avoid passing this knowledge on if doing so
would jeopardize their jobs or living standards because of competition. Furthermore and from an evolutionary point of view, the larger the playing field and the cognitive divergence of players cooperating, the less likely it is that 'tacit knowledge' associated with acquired and habitual skills can be known or appreciated by any centre, eg, the top of a management hierarchy (Hodgson 1988:259). If it is acknowledged that the (cooperative) exchange of such knowledge is crucial for productivity or innovation, then incentives for voluntary exchange will be important; a fair wage structure - and that means in this case wages that are not widely dispersed - is a necessary element for cooperation between very divergent players with complementary 'tacit knowledge.'

Wage structures that are felt to be inequitable also eventually manifest themselves in a lack of motivation and of willingness to adapt and cooperate. Very little innovation would occur in a purely competitive context. The reason has been set clearly in our extended transactions cost framework: employment relationships related to research and development are characterized by high performance ambivalence, strong interest congruence and team-work necessities, and by extremely high investment risks.

4.2 More Equality of Employment Opportunities

Let us start with some considerations on labour market structures. In real life labour markets are horizontally and vertically segmented. There are institutional borders between occupational, sectoral, or internal labour markets, and there are barriers to be overcome when moving into higher positions. This segmentation of the labour market is evident in all European countries, albeit to greatly varying degrees.17

The labour market is segmented to some extent for economic reasons, often in an efficient manner. One example is occupational quality

\[17\text{ For an institutionally oriented research on labour markets, these differences represent a fascinating set of quasi laboratory conditions. Following the elimination of territorial and sovereign barriers, it will be interesting to see which lines of segmentation will disappear, remain, or reemerge.} \]
standards for the practice of certain vocational activities. The universalization of such standards by means of a craft certificate, master craftsman’s certificate, or diploma promotes cooperative competition in several respects. It increases mobility and, hence, the range of options for cooperation. Universalization of standards reduces transaction costs and thus also obstacles to cooperation. It contributes to professional ethos, thereby reducing deceptive offers of cooperation. It controls supply in the corresponding segment and thus reduces the danger of cutthroat competition. Following evolutionary lines of thought, such as the ideas propounded by Norbert Elias, one of the major future tasks of the labour market in a Europe without internal borders will be to revitalize and harmonize labour market segments for skilled workers and professionals. It will be necessary to set the professional quality standards at a high level but also to generalize them to facilitate diversity on the regional level and in the plant. Whether this will succeed is another question. Scepticism is warranted by the growing significance of what are already partly multinational labour markets tailored to specific plants and by the still only rudimentary development of transnational institutions in the realm of industrial relations - institutions like European professional associations, European unions, or European employers’ associations.

Other institutional barriers to horizontal or vertical mobility on labour markets, however, are outmoded, inefficient, and discriminatory. This is especially true of sex discrimination, which is unjustifiable on any premise of cooperative competition. Because women have at least as good an education as men, their underrepresentation in senior status positions represents a partially untapped potential for cooperation (see, among others, Blau/Ferber 1986:262-70; Moller Okin 1989; Fuchs 1988). Moreover, the concentration of women in just a few occupations and sectors reduces the options for cooperation and raises the risk and the duration of their unemployment if economic restructuring becomes necessary.

In addition, the differences in sex segregation within Germany illustrate mistakes of past equal opportunity policies. True, the labour-market participation rate of women in the former GDR - unlike that of women in the former FRG - was almost as high as that of men. The average
level of occupational qualification among East German women also seems to be higher, and their representation in at least middle-management positions seems to be greater than that of their West German 'sisters'. These achievements, however, are tied partly to economic exigencies (low living standards) and partly to regulations that target women specifically instead of aiming at the total possible labour supply regardless of sex. The regulations applying solely to women include the monthly "household day", the right to take leave in order to care for their children when they fall ill, and the one-year, guaranteed parental leave (normally granted only to mothers or grandmothers) at between 60% and 90% of the beneficiary's net income. These special regulations handicap women in cooperative competition, for they make women into a special group on the labour market, burden them with the tie between family and job, while releasing men from this responsibility.

If the benefits derived from family policy or educational policy are to be neutral for the competition between the genders, then they must apply to both genders. By the same token, the direct and indirect costs related to benefits of social policy or legal claims related to parenthood must on principle be borne by society at large or imposed equally upon everyone, just as with the costs of other public or merit goods -- such as primary and secondary schooling. In this sense, the extensive public facilities for child care in the former GDR are to be seen positively. The same applies to the legal right to several weeks of leave to care for sick children until they are fourteen years of age. Single working mothers with one child are entitled to four weeks of such leave; with two children, six weeks; with three children, eight weeks, and so on up to thirteen weeks. The point is that the principle of universal application would entitle men to such leave as well. In both cases, the institutional standards in the former West Germany were considerably lower.

For the time being, the lower standards seem to be prevailing in the process of unification. As of July 1, 1991, the regions of the former GDR will also be subject to the regulation that leave to care for a sick child can be granted to men, too (however - only if the child is under eight years of age and only up to five days under relatively unfavourable financial conditions). But the functionality of lower standards appears to be
questionable not only from the stance of equal opportunity but also from the economic perspective. The Europe of tomorrow cannot afford to continue investing in education and science and then have a large share of her highly qualified people, usually women, sitting at home against their will in their most creative phase of life because their children are not cared for adequately outside the home or because young parents are not able to combine flexibly caring and producing functions.\footnote{18}

4.3 Efficiencies and Inefficiencies of Unemployment Benefits

"Equality does make very good sense as a form of group insurance. Any hunter knows that hunting is chancy, that an empty-handed return is only too likely, in which case it is good to know there might be another source of supply." (Barrington Moore 1978:38)

The occurrence of involuntary unemployment is a case for "solidarity". But how is this modern form of insurance to be organized without negative (and maybe even with positive) effects on the efficiency of the chancy labour market? Let us start with the crucial parameters of unemployment insurance: the benefit level and the benefit duration. Then, a cross-matrix reveals four possible strategies\footnote{19}:

\begin{center}
\begin{tabular}{l|cc}
\textbf{Benefit Level} & high & low \\
\textbf{Benefit} & long & 1 & 2 \\
\textbf{Duration} & short & 3 & 4 \\
\end{tabular}
\end{center}

I shall argue that strategy 3, with a number of caveats, is best suited to an equality with efficiency strategy.

\footnote{18}{Although very important, I have not discussed here another strategy of enhancing equality cum efficiency: the increase of equality through workers participation. Hodgson (1988:265) cites plentiful evidence that worker participation can lead to substantial increases in motivation, work effort, and hence efficiency. In terms of evolutionary systems theory, worker participation can be interpreted as providing increasing internal variety as a solution to the increasing exposure of firms to external varieties, i.e., uncertainty (Hodgson 1988:257f).}

\footnote{19}{Some welfare states fit strategy 1 (e.g., France, Germany, Netherlands, Belgium); Italy - apart from the Cassa Integrazione Guadagni - is a case for strategy 2; Sweden and the United States are clear cases for strategies 3 and 4 respectively.}
Strategy 1 creates equality at the cost of efficiency due to its emphasis on redistribution without improving, ceteris paribus, employment opportunities in the long run. Strategy 2 is suboptimal both in terms of equality and efficiency: the redistributive effect will by definition be small, and may not even compensate for non-pecuniary losses, whereas the incentive to work and the political pressure to fight unemployment remain low due to the provision of a permanent - although meager - social safety net.

Strategy 4 reflects the libertarian standpoint according to which generous unemployment benefits create negative incentives to take up work in the first round, and distort market wages in the second round, thus inducing a vicious circle of increasing unemployment. On the demand side as well, generous unemployment insurance induces the adoption of production methods with higher lay-off risks, and lowers employer's willingness to hire due to increased labour costs. This is at first glance a plausible model although it puts the main burden of adjustment to structural change on those individuals who happen to be hit by unemployment. Thus, any income loss in favour of - from the point of view of the individual - doubtful allocational gains of the whole economy may be considered as unfair, but not necessarily if the labour market is viewed as a casino. In any case, equality loses in favour of efficiency, at least in the short-term.20

However, doubts can also be raised with regard to the efficiency impacts of this model. (1) Neither the theoretical nor the econometric literature actually confirms significant disincentive effects corresponding to benefit levels; of greater importance seem to be the disincentives of long-duration benefits (Clark/Summers 1982, Björklund/Holmlund 1989, Burtless 1987, Euzéby 1988, Schmid/Reissert/Bruche 1987:197-213). (2) The model assumes immediately downwardly and upwardly flexible wages, which are neither socially - see section 4.1 - nor economically efficient, see below. (3) The model also neglects micro-macro interrelationships, such

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20 The long-run effects would have to consider the incidence of unemployment on lifetime income for which there are no comparative figures available.
as the possibility of contagious unemployment in which low unemployment benefits would further reduce effective aggregate demand.

Strategy 3 seems to be both an equality and efficiency enhancing arrangement, at least given the following conditions. Social wages rather than market wages regulate the employment relationship according to the principle of "comparable worth". The burden of adjustment to structural change thus lies in the first place with the firms: social wages increase the wage cost pressure on "lame ducks" and decrease it for innovative firms, in this way stimulating structural change. Unemployment insurance, in this model, has the function of supplementing social wages in order to push labour out of unprofitable skills by compensating the acceptance of workers' adjustment to structural change - in the form either of high short-term unemployment benefits or training and educational stipends. The benefit period, however, should remain short (up to about one year) to put pressure on both the individual and collective agencies to adjust actively to new circumstances. This pressure is both individually as well as institutionally relieved if unemployment benefits can be extended indefinitely or if they are replaced by disability or early retirement schemes if no "suitable jobs" are available.

Germany is a good case of institutionalized disincentives for employment opportunity measures ("active labour market policy"). As shown by international comparison of the modes of financing labour market policies (Schmid/Reissert 1989 and Schmid/Reissert/Bruche 1992), the institutionalized mode of fund-raising, spending, and employment opportunity measures affects the outcome of policy-makers' decisions without them necessarily being aware of it. In other words, the "hidden hand" of institutional traditions - many of which, of course, reflect (old) power relationships or vested interests - is at work.

The present German financing system, however, has clearly revealed defects, particularly with regard to institutional incentives to pursue employment opportunity measures. There is a clear bias in favour of

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21 Which I consider a modern form of a "solidaristic wage policy" for its account of professionality, performance and responsibility oriented criteria on the one hand, and across-the-board application (sectoral/regional) on the other hand; further consideration of this point, however, is urgently required.
financing transfers to the involuntarily unemployed rather than training or job creation. Germany’s financing institutions contain, in evolutionary terms, no "stop rules" of relatively generous transfer payments that make sense only in the short-term. In addition, the institutionalized priority on wage replacement payments crowds out active measures (i.e., those able to improve competition) both in fiscal and operative terms.

In contrast, for instance, to Sweden, the fiscal burdens of active labour market policy are institutionally largely incongruent with fiscal reliefs in Germany. In other words, agencies spending on active labour market policy (the employment offices, the municipalities) do not get all, or even most, of the fiscal returns in terms of taxes or contributions coming from newly created jobs. As a result, important decentral collective actors have no financial incentive to give a "handup" instead of a "handout". The lack of financial incentives for decentralized reactions is reinforced by organizational defects. With increasing numbers of unemployed, the employment offices are becoming increasingly preoccupied with the administration of unemployment benefits and have little time to provide and promote organisationally demanding employment services. Especially striking in Germany is the absence of a mechanism to terminate unemployment assistance (means tested, but still benefits related to former net income), which can be guaranteed until the employment offices are able to offer a reasonable job.

An example of a meaningful evolutionary "stop rule" would be the obligation of local authorities and employment offices to offer jobs or training places for all long-term unemployed people, with the federal government providing grants for the necessary investment and infrastructure instead of simply providing unemployment assistance. Under the assumption of a reasonable limit on central public funding this would even create a competition for public funds, that is, a stimulus for innovative employment or job creation.22

22 As expected the German system for funding labour market policy came under renewed political pressure due to the huge deficits caused by the reunification process. The Federal Government has started to limit the expenditures for active labour market policy - especially in the booming public works industry (the so-called ABM-measures).
5. A Metaphorical Summary

The Equality and Efficiency topic is an old puzzle. It goes back at least to the Book of Matthew:

"The kingdom of heaven is like a householder who went out early in the morning to hire laborers for his vineyard. After agreeing with the laborers for a denarius a day, he sent them into his vineyard. And going out about the third hour he saw others standing idle in the market place, and to them he said, "You go into the vineyard too, and whatever is right I will give you." So they went. Going out again about the sixth hour and the ninth hour, he did the same. And about the eleventh hour he went out and found others standing; and he said to them, "Why do you stand here idle all day?" They said to him, "Because no one hired us." He said to them, "You go into the vineyard too." And when evening came, the owner of the vineyard said to his steward, "call the laborers and pay them their wages, beginning with the last, up to the first." And when those hired about the eleventh hour came, each of them received a denarius. Now when the first came, they thought they would receive more; but each of them also received a denarius. And on receiving it they grumbled at the householder, saying, "These last worked only one hour, and you have made them equal to us who have borne the burden of the day and the scorching heat." But he replied to one of them, "Friend, I am doing you no wrong; ... Take what belongs to you, and go; I choose to give to this last as I give to you. Am I not allowed to do what I choose with what belongs to me?" (Matthew 20, 1-16; quoted in Rae 1981:24)

The affirmation of private property rights is certainly not the interesting point in the context of this paper. One could add, however, that the parable supports the view of the recent Encyclica by the Pope, "Centesimus Annus", that private property of the means of production is justified only if it is used for productive work, ie, for creating employment opportunities (Johannes Paul II 1991:43).

As I understand it, the parable is about the contingencies of equality and efficiency. It depends on both the standpoint and the context whether a given constellation is judged equal and efficient, and whether both go apart or together. It could be, for instance, that the decision of the vineyard householder was wise in saving the whole vine harvest (in the face of stormy weather) by hiring the last marginal worker and paying that person the same. In that case, the work of only one hour would have had more value than the total work of all the others. If, however, the vineyard householder - in case of replantation or daily chores on the vineyard -
depends on continuous team-work of his staff, she or he probably has to pay fairly equal wages to get good and reliable work done. Many other interpretations are possible, but not all would be compatible with the "equality cum efficiency" maxim.

The contingent valuation of work effort is nothing new. Overtime work, Sunday work, shift work, etc are paid more than work at ordinary working times. Entitlements related to work are also increasingly becoming decoupled from numerical work input. An example is the equal counting of part-time work if related to parental obligations with respect to seniority or pension entitlements. More and more status-oriented large wage differentials being abolished. A closer look at the reasons behind such changes would very likely reveal the logic or rationale of effective social cooperation beyond cooperative competition. To put it rather provocatively: Why should the working hour of an economics professor be paid five to ten times more than the working hour of a (mostly female or foreign) labourer in the fish food industry? Would an hourly wage of two or three times more not be enough? May be these laborers would then pass some 'tacit knowledge' to the economists.

To sum up: The willingness to engage in effective social cooperation depends on shared values of justice concerning the assessed "equality" of allocating people in the cooperative game and distributing the outcome from cooperation. These values operative in a "just" world will and should depend, however, upon circumstances. I have distinguished four contingent types of the employment relationship. First, in relationships of cooperative competition, that is in typical market situations in which static economic efficiency is the primary goal, allocation according to competence and distribution according to the proportional contribution (ie equity) rather than equality will and should be the dominant principle of justice. Second, in employment relationships characterized by hierarchies, some status-related principles of distributive justice (eg seniority, hierarchical position) will be functional, but the importance of this type seems to be diminishing. Detrimental both for social and economic efficiency, however, are employment relationships still governed by social or political hierarchies which allocate labour according to traditionally rather than functionally defined roles (such as the male
breadwinner role). Third, allocation according to professionalism and egalitarian rather than equity principles of distributive justice will be efficient in employment relationships under team-work conditions; social networking on an equal basis is characterized by great difficulties of measuring individual productivity and by the need for innovative capacities in the face of highly uncertain environments. Fourth and finally, in employment relationships characterized by dependency, lack of competence and immediate reciprocity capacity, solidarity principles of redistributive justice and entitlements (and respective care responsibilities) have to be implemented. The overall efficiency of an active and cooperative society depends on the flexible coordination of these principles. Trust and solidarity will be preconditions for reaping the fruits of enlarged cooperative competition and professional competence in our globalizing economy.

To sum it up metaphorically. Competition in the sense of a contest is good. However, the willingness to engage in such a contest in the first place declines with diminishing chances of winning or at least improving one's position somewhat. To that extent, a social market economy worthy of the name should not only be a contest but also a dance, at which cooperation among "equals" is the important thing.
Bibliography


Johannes Paul II (1991): Encyclica CENTESIMUS ANNUS in Memory of 100th anniversary of RERUM NOVARUM, 1 May.


