Working Paper Series No. 122

ECONOMIC ARTICULATION: A NEGLECTED DIMENSION OF ECONOMIC PERFORMANCE?

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April 1992

Contents

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A NEGLECTED DIMENSION OF ECONOMIC PERFORMANCE?[1]

> Here and there, it is true, we have found islands of conscious power in this ocean of unconscious co-operation, like lumps of butter coagulating in a pail of buttermilk..... But even these patches are still small and scattered in comparison with the whole field of economic life. In the main, the co-ordination of the efforts of the isolated business leaders is left to the play of impalpable forces - news and knowledge and habit and faith, and those twin elementals, the Laws of Supply and Demand.
>
> Professor Sir Dennis Robertson (reflecting on the disarticulated state of the British economy in comparison to Germany in 'The Control of Industry', 1923)

> Some markets are stable, others have to be regulated.
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> Dutch Nobel Prizewinner Jan Tinbergen (launching Economen Voor Vrede, the Dutch/Flemish Chapter of Economists Against the Arms Race, Rotterdam City Hall, 1990)

Introduction

Many types of non-market 'associational' relationships have been neglected by neo-classical economic theory. This paper focuses therefore on what the Final Report of the broadly-based Standing Commission on the Scottish Economy (1989) termed 'mechanisms of economic articulation' : that is, the strong network of (formal and informal) linkages which in successful economies 'harness market forces, negotiate round market failures and in other ways serve many of the functions necessary for a complex economic system to work'.[1]

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1 An earlier version of this paper was delivered in a workshop on the Political Economy of Success at the UK Political Studies Association Conference held at the University of Lancaster, April 1991.

Work carried out for the Commission[2] had highlighted the fact that most successful economic units (nations, regions, localities and firms) build formal and informal networks of communication, exchange and joint action (with or without state support, depending on the circumstances) in areas such as information sharing, training, product development, provision of finance and in certain cases (for example, in rural agricultural areas or inner city concentrations of clothing firms) even the sharing of collectively provided capital equipment.

A consequence of the theoretical neglect of such articulation mechanisms by conventional economics is that the practical importance of these non-market and often collectivist institutions tends to be seriously underestimated - until of course a British company tries, for example, to take over a large German firm, and quickly discovers that this is rarely possible; or finds that closing a plant and laying off workers in a mainland European country has to be negotiated in terms of an employer's social contract with his employees and their local community. These regulatory requirements and institutional impediments to the free play of market forces are also generally seen by Anglo-American outsiders as 'obstacles' to economic efficiency rather than 'enabling' socio-economic institutions.

One recent disturbing example of this kind of view comes from the World Bank/IMF/OECD report on 'The Economy of the USSR' (1990) prepared prior to the establishment of the new European Bank for Reconstruction and Development. This advocates what is commonly known as a 'Big Bang' approach to economic transformation in the Soviet Union, involving rapid market liberalization, minimal state intervention and a deregulated economic environment. The only reference to the crucial role that is played in successful Western European 'market' economies by intermediate institutions such as those outlined above is a one-sentence reference to trade associations which expresses concern at 'the current tendency for enterprises which are now in a particular branch ministry to join together in trade associations' since 'it may favour oligopolistic rather than competitive (sic) behaviour.'

This market-oriented rebuke appears to overlook the fact that 'competition' is in reality a contest i.e. a process rather than a state of nature (something increasingly emphasized by recent writing on strategic trade theory), and that behind the veil of every successful capitalist economy there lurks not an 'Invisible Hand' but rather a complex web of articulation arrangements and 'Invisible Handshakes'.[3] Less successful economies tend to be those where such associational arrangements are either underdeveloped or absent, resulting in various types of market failure which go uncorrected.

This paper consequently tries to counter the practical and theoretical neglect of such institutions in the Anglo-American 'Cosmopolitan' tradition by giving some examples of the articulation weaknesses in the British and Scottish economies identified by the Standing Commission on the Scottish Economy, drawing comparisons where appropriate with the position in Germany and other European economies.

In so doing, however, the aim is to move the discussion beyond simple description and comparison of the institutional infrastructure underpinning the successful performance of economies such as Germany, Japan and the smaller European democracies, to emphasize the point that adaptation, rather than simple replication of such development paradigms will be required to achieve similar results in different economic contexts and starting from very different initial conditions.

Particular emphasis will be given to 'the German model' since part of the strength of the German approach to economic development (as represented by the work of Friedrich List (1837) in the 19th Century but also by neo-Listians such as Dieter Senghaas (1982) in the late 20th Century) is precisely this recognition that the required mix of successful development paradigms such as 'the German model' is dynamic, and at least in some of its surface institutional manifestations can be expected to change significantly over time, space and between different industrial sectors, depending on the context. Currently we can watch this happening as Germany prepares for the EC Internal Market, and struggles to deal with a major regional development challenge in its newly acquired Eastern Lander.

The final section then uses this evidence and other examples to suggest some of the most recurrent 'stylized facts' associated with effective articulation systems in successful economies which the paper argues should be taken into account when deciding whether development paradigms are indeed transferable, and how they should be adapted to different circumstances. The principal conclusion is that, in line with recent 'Post-Fordist' thinking and the experience of recent local government interventions in local economies in the United Kingdom, we should be seeking a 'flexible geometry' of intervention which (as Murray,[4] Bryden and others have suggested) should focus on process as well as programme.

The Principal Types of Economic Articulation

David Donald (1989) noted in evidence submitted on this theme to the Standing Commission that the term 'economic articulation' can be used quite flexibly to capture to a whole series of 'micro-political' ways in which firms interact with their environment, and can be extended to cover non-market manifestations of economic behaviour ranging from fairly elusive 'cultural' factors (such as 'trust and honour' and 'understandings'); through to more tangible and explicit forms of co-operation and agreement, (such as cartels, training consortia, and joint ventures in areas such as research); and more formal and persistent associations with a range of general functions (such as Chambers of Commerce, Trade Associations, Employers Organizations, and many different varieties of public sector/private sector partnership fostered by the developmental state).

A major advantage of this approach therefore and the resulting 'flexible geometry of intervention' that follows naturally from adopting such a framework is that it gets away from the fairly sterile polarity which has in the past characterized debates between the plan and the market; and allows examination within the same overall theoretical framework of a large number of diverse institutional arrangements which would otherwise (as Richardson (1972) pointed out) fall between the twin stools of the public and private sector, but which are nevertheless perhaps the crucial ingredient in the recent dynamism of certain mainland European economies (and perhaps also some of the Asian NICs).[5]

According to this type of approach too, markets themselves are viewed as part of a continuum, and simply another form of institution, with market outcomes being determined by the a priori distribution of initial endowments and the result of a competitive struggle which may be far from equal. Zysman (1983) is correct to remind economists that 'Politics is prior to markets', and it therefore follows that one particularly important function of public articulation or community-based or co-operative forms of association is to provide countervailing collective action to modify the distributional consequences of unregulated market outcomes.

Collective institutional arrangements are also needed because in most modern capitalist economies in the developed and developing world, market failure is pervasive rather than exception (for example because of information failures, free-rider problems, and risk aversion). Tinbergen sums this up by noting that 'Some markets are stable, others have to be regulated'.[6] Moreover, as Senghaas (1982) confirms, no modern European economy developed without massive state intervention and concerted action at a certain stage (often involving state protection of infant industries) - so why should late developers in the Third World be any different?

In this context, two particularly important aspects of economic articulation should be noted, not least since this is perhaps the most frequent way in which the word 'articulation' is used in the literature, and has received more attention than the more nebulous relationships described above.

Firstly, there is the degree of external articulation between a national economy and the international economy already alluded to - an aspect that is central to the work of Friedrich List (1837) in the last century, and underpins the work on autocentric development by neo-Listians like Dieter Senghaas (1982) and Marxist advocates of selective delinkage like Samir Amin (1990). Of course this aspect of articulation quickly shades into discussion of trade policy as well as industrial strategy, and it can also suggest a framework for the analysis of the activities of transnational corporations and other 'meso-economic' economic sectors (see Holland (1978)) which might otherwise risk falling between macro and microeconomic stools.

Secondly, there is the degree of internal articulation in an economy between the financial sector and the industrial sector (a relationship which is of course crucial to the analysis of accumulation behaviour.)[7] This aspect of intersectoral articulation has, for example, attracted particular attention in Germany and France - on account of its strength; in Scotland - on account of its weakness; and it is also a theme often encountered in the writings of Latin American structuralists - since often large private sector company groupings buy over banks to finance their activities directly.)

The wide catchment area of the term is therefore its great strength in that it captures a whole species of economic activity that would otherwise be missed. Giving greater theoretical precision to the concept is difficult, however, though as will be suggested below, the recent emergence of a new 'Economics of Institutions' inspired by the work of Coase (1937), but also drawing inspiration from systems theory and the other behavioural social sciences (cognitive psychology, sociology as well as history and economics) does point to a way of overcoming this imprecision in a way which makes a practical virtue of the term's flexibility and 'fuzziness'.

Integrating the Concept of Economic Articulation into Economic Theory

Many detailed examples of such arrangements can be cited: public sector/private sector partnerships sponsored by the local state and official development bodies; different types of purely private sector articulation and association that emerge between and among small firms and large firms (e.g. the artisan-led models of development documented by Brusco and Sabel (1981)[8] in the context of Northern Italy, and the small engineering firms in the remote 'high-tech manufacturing hamlet' of Sakaki in rural Japan mentioned by Friedman (1988));[9] or some of the better-known European examples, such as the powerful (and statutory) German Chambers of Commerce, and their less well-documented French counterparts[10] both of which form part of much wider systems of concerted economic and industrial organization and planning.

The essential point linking all these forms of articulation, however, is that all seem they involve to a greater or lesser degree a suspension of the operation of the free market and/or a substitution of individual by collective action in the pursuit of strategic objectives.

Paul Krugman (1990) points out that this type of behaviour is very typical of how successful large corporations operate, suspending the normal short term rules of market discipline when they are restructuring or moving strategically. Modern theories of the firm are rapidly developing sufficient flexibility to deal with these shifting firm and market boundaries.

Firms are usually defined these days not as a 'black box', or even as sharply dichotomized 'islands of planned activity amid a sea of market relations', but rather as a bundle of internalized transactions, with (following Coase (1937)) the precise boundaries of the firm and the market being defined by an assessment of the relative 'transactions' costs of internalising or externalising particular activities at any point of time. Coase pointed out that there are costs associated with using markets as well as benefits - and these help determine the size of firms - but clearly additional dimensions are added when such costs can be shared with other economic actors.

Analytically, this is of course a much more flexible (albeit more complex) way of looking at the world, and as two recent seminal works by Geoff Hodgson (1988) and Judith Marquand (1989) show, this general approach can be developed into a comprehensive new framework for the analysis of a much wider range of economic institutions (including the institutions of economic articulation referred to above). This framework can also be used to incorporate a wide variety of alternative behavioural or 'conduct' assumptions beyond the conventional economist's assumption of 'rational economic man' and 'profit maximization', and incorporate a much wider range of performance objectives than simple 'Pareto efficiency' (an outcome that depends on the initial distribution of endowments and can thus be very unfair) within the broad 'Structure - Conduct - Performance' framework usually employed by industrial economists.

Other important theoretical results in economics and the other social sciences can then be analysed and extended to other institutional forms within this more flexible framework with often very interesting implications. For example, in his more technical writings on trade theory, Krugman has posed the question as to why if the 'protective' logic outlined above is applicable to large firms in areas such as the development of new technologies and new markets, can the same arguments can be extended to other economic units, such as nations? In one swipe, such a possibility threatens to demolish neo-classical trade theory (based on free trade and Ricardian comparative advantage), and List's tirades against 'Cosmopolitan Economics' would appear to have been finally vindicated.

Although this suggestion has been seized on by the protectionist lobby in the United States, and neo-Listian writers such as Kuttner (1991), Krugman himself argues that the history of state intervention suggests that 'government failure' in this area is almost as pervasive as 'market failure' and therefore it is unlikely given the current state of the art in the United States that governments would succeed in intervening on a large scale successfully.

[He does point out, however, that the costs to the U.S. taxpayer of President Bush's decision to bail out market errors associated with a 'misguided attempt at deregulation' (the Savings and Loans scandal, which he describes as 'the biggest single economic policy disaster of the 1980s') will be 'at least five times as large as the annual cost to U.S. consumers of all U.S. import restrictions.']

Concern over the risk of government failure accompanying a 'tough trade strategy' means that he himself confines his policy recommendations to a call for a limited U.S. industrial strategy, pointing out in effect that what is good for the German and Japanese competitors of General Motors will be good for America. Similar conclusions on the need for much more attention to be given to organized industry support and improved articulation on the supply side can be drawn from the work of Michael Porter (1990) on 'The Competitive Advantage of Nations'.

The Need for Accurate Model Specification

Market liberals in Britain and the U.S., and in international institutions such as the World Bank and IMF which share a similar outlook, are therefore on the retreat in the face of this detailed theoretical and empirical onslaught and the evident success of the Japanese and West German approach, hence the recent upsurge of interest in 'the social market economy' which is seen in some quarters as a way of saving at least part of the free market paradigm.

This rescue attempt, however, requires that these models be seriously misrepresented. The export boom in misspecified development paradigms continues apace nevertheless: having had its fingers rapped in the mid-Eighties when closer examination of the Asian NICs model showed there was much more to these success stories than simply export-orientation and market liberalization which were the two features the Bank chose to draft in to countless structural adjustment packages across the developing world, they have now (like John Major) discovered and misspecified the 'social market economy' which they are now marketing to sub-Saharan Africa as 'The Nordic Model of Development'.

Lumping Norway, Sweden, Finland, Denmark and Iceland together, they conclude: 'The Nordic countries' remarkable transformation from agrarian societies into modern industrial economies offers a distinctive development paradigm. Their success resulted from a social market economy with its combination of free-enterprise economic policies and active social policies.'[11]

Conveniently, they not only gloss over the significant variation between the development strategies of individual Scandinavian countries, but for example in the Finnish case, fail to mention the central importance of the relatively equitable ownership distribution of the forest resources in providing a source of domestic accumulation and effective demand on which subsequent industrial development could be built; and of course the key role of state sponsored articulation in building up the Finnish engineering industry, initially as a source of post-War reparation payments.

The Finnish example quoted here is doubly interesting because of the influence of the German Historical School (List and others) on Finnish economic thinking, but similar criticisms could be levelled at the conclusions the Bank draws from all the other manifestations of 'The Nordic Model' (even though they do, to be fair, mention the critical role of the state in providing the high level of education and training necessary for firms to adapt and compete successfully in specialized international markets.)

Economic Articulation in Germany

But of course it is in the case of the German version of the 'social market economy' that the myth of the invisible hand really comes up against the true reality of what Arthur Okun termed the 'Invisible Handshake' and the true extent of organized articulation at all levels of society.

The authors of the 'Economist Guide to Germany' (1990) observe, for example, that: 'For a country often held up as a prime example of the free-market economy, Germany has an array of links between government and business that are quite remarkable in their depth and extent. State ownership and state holdings in business are extensive. Subsidies are among the highest in Europe. Rules controlling business are far-reaching and strictly enforced. Taxes on business are very high. And there is a tangled web of interlocking interests and personal connections reaching into every corner of German business.'

It goes on to note that despite limited attempts by Chancellor Kohl to roll back the state, the federal government retains a majority holding in dozens of companies (apart from the nationalized public services), has stakes of over 25% in almost 500 German companies, and smaller stakes in many more. The individual Land governments also have substantial stakes in many firms.

Real business power is however 'concentrated firmly in the hands of the big banks and the official institutions - industry associations, trade unions and the political hierarchy - that earn the epithet 'Germany Incorporated'.....It is hard to overestimate the hold of the banks, and especially the big banks, on the German business scene. A web of financial links, holdings and personal contacts extends their control deep into the heart of almost every major company in the country, and the hegemony over German business of the Deutsche Bank in particular is inescapable.'

Deutsche Bank - which interestingly also has a highly decentralized structure which means regional head offices retain a considerable degree of independence - 'has major holdings in a range of leading companies, including Daimler-Benz, Bayer, Allianz ('sometimes seen as the insurance equivalent of Deutsche Bank') and Siemens, and the bank also claims to handle more than 20% of all Germany's foreign trade.' Further down the banking hierarchy, are the savings banks and eleven Landesbanken part-owned by the Land and Federal Governments who act as Germany's credit institutions.

Banking influence on the economy is exercised in a number of ways: 1) through their own direct shareholdings; 2) the influence that comes from the 'house bank' tradition, their role in credit allocation and the relatively high gearing ratios of German firms (equity markets are relatively underdeveloped and less than 1% of German enterprises are publicly quoted on the stock exchange); 3) the automatic proxy votes of shares held in custody by them (Depotstimmrecht) (which according to The Economist account for 'nearly all those owned by private investors'); 4) the advice they give to other shareholders who bank with them; and 5) their institutionalized position on the supervisory boards of major companies.

Over and above the normal board of managers (or Vorstand) which tends to operate on a collective and consensual basis, most major companies are required by law to have a supervisory board or Aufsichtsrat which must approve all important investments and strategic moves, appoints and can dismiss the Vorstand, and is composed exclusively of outside directors. Half of these are elected worker representatives (under Germany's Mitbestimmung or worker-participation in management system), with the rest effectively being chosen by the banks on account of their own shareholdings and their influence over proxies.

This is however only part of the overall articulation story: in addition to these very structured state-bank-enterprise relationships, there are a whole series of offensive and defensive regulations on standards (most recently in the area of environmental protection); a whole range of different types of state intervention and public sector/private sector partnership at Land level and below; careful organization and concertation of R&D policy; and systematic financial aid for the small and medium-sized industrial sector.

There is neither space nor time here to even describe in outline the full range of 'meso-organizations' or 'Interessenverbande' involved in economic articulation, or describe the framework of law and social obligation within which the social market economy currently operates.[12] Specific mention should however be made of the statutory Chambers of Commerce and Industry Associations (which are much more powerful than anything equivalent in the UK). Handwerskammern, or chambers of craftsmen (types of guild dating in some cases back to before Bismarck) also play a key role in training.

According to a recent article on the Handwerkskammern, 90% of school leavers in West Germany are apprenticed to a Meister in one of the 450 trades recognized by the government. Firms are legally required to join, pay a levy as an employer (which gives them the right to train apprentices), and both employers and employee members belong to a Vollversammlung or assembly in which employers have two-thirds of the votes and employees one third.[13]

Horses For Courses

Overall this all seems much more elaborate and organized than the view of the German system that Conservative politicians in Britain who are now talking about a switch to a social market economy appear to have in mind. Of course equally complex and well-articulated models exist in other successful European countries, though the mix does differ depending on the circumstances. In France, for example, the system of indicative planning remains extremely important, and has traditionally been backed up by a strong government role (direct and indirect) in the allocation of credit.[14] The last decade has also seen a major decentralization of the economic planning effort, reversing the Napoleonic tradition of central control that previously characterized the French approach.

Recent developments in Germany, of course, have led some British commentators to argue that the German system is 'in crisis' and about to be dismantled. However, part of the strength of the German approach to economic development is precisely this recognition that the required mix of successful development paradigms such as 'the German model' is dynamic, and at least in some of its surface institutional manifestations, can and should be expected to change and vary significantly over time, space and between different industrial sectors, depending on the context and changing circumstances.

Thus in response to the challenge of economic development in the new Eastern Lander, influential business commentators are arguing not for a weakening of the 'social market' approach, but changes in the opposite direction towards what the Chief Economic Correspondent of 'Die Zeit' suggests should be an industrial policy 'a la francaise' with an enhanced role given to the state.[15]

Similarly, the recent 'relaxation' of takeover rules in respect of the battle between Pirelli and the German tyre manufacturer Continental has been interpreted overseas as a move towards deregulation. But the initial approach to Pirelli for merger came from German bank representatives on the Vorsichtrat, and they quickly applied the brakes when Pirelli tried to turn merger into takeover.[16] The deal will probably go ahead, but on terms set by the German company which judges such a merger as being in its own national and corporate strategic interest.

Articulation Weaknesses in Scotland

In Britain and the United States, outside the military-industrial complex there is of course nothing remotely comparable to this tight system of economic articulation and concertation of national and regional interests (though the remains of the NEDC sector working parties in the UK and the success of many local government inspired initiatives during the 1980s may provide an institutional base on which something more modest could be built given time.)
In the British case, the Standing Commission on the Scottish economy agreed that such institutions of articulation are 'weak, ad hoc and neglected' when compared with the economic support networks that have developed in almost all Britain's major competitors.

The weaknesses become even more marked as you move out from the core towards the periphery where market failures become even more pronounced and the need for effective non-market articulation mechanisms becomes correspondingly greater.

This verdict was supported by empirical evidence drawn from one of the last surveys commissioned by the Industry and Enterprise Directorate of the Scottish Development Agency (before its emasculation and balkanization by the British Conservative Government into a significantly weaker network of underfunded, 'private sector owned and led' bodies modelled on the troubled structure of Local Enterprise Councils established south of the Border, and translated to Scotland under a new organizational umbrella called 'Scottish Enterprise').[17]

The SDA noted that while Scotland was endowed with a 'comprehensive network of formal linkages in the form of accountants, solicitors, banks, financial institutions and public bodies', extensive survey work within this showed that 'there was evidence that the culture was not entirely supportive of potential firm founders and that the limited nature of the networks is likely to inhibit new venture formation'.

This has a pervasive negative effect on the agility of the whole regional economic system. The Commission demonstrated econometrically the relationship between regional variations in new firm formation rates and structural characteristics (such as the degree of external ownership and control) which are symptomatic of weak internal articulation in a regional economy and contributed to what was described as 'neutered cat syndrome' (an industrial structure composed of firms that do not have the required range of devolved articulated functions to either innovate, adapt nor spawn successors.)

It also quoted evidence (from Professor Paul Hare of Heriot Watt University) identifying another type of 'stunted growth' phenomenon amongst already established small firms in central Scotland, and used detailed case work carried out by Professor Gavin Reid (of St Andrew's University) and Dr Lowell Jacobsen on a small but representative sample of 'small entrepreneurial firms' in Scotland to show how this may be linked to weaknesses in the articulation network and problems of access to credit on appropriate terms at critical stages of expansion. This also highlighted the importance of improved coordination between macroeconomic policy (for example, on interest rates) and microeconomic policies which aim at stimulating small and medium-sized businesses which are often highly-geared, particularly during periods of expansion and innovation.[18]

Such findings have subsequently been confirmed on a wider European Community scale by a recent study of traditional industrial regions carried out for RETI and the European Commission by the Catholic University of Louvain.[19] This concluded that in comparison to regions which had been relatively successful in undergoing structural adjustment (such as Nord Rhein Westphalia), less successful European regions with a similar industrial tradition (such as Strathclyde in Scotland) remained relatively disarticulated in comparison, and in the words of the authors will 'only regain global dynamism if industrial restructuring involves the complete socio-economic systems of such regions and not, as has been the case so far, individual industrial enterprises.'

Clearly, therefore, improvements in 'economic articulation' are fairly crucial in the case of a peripheral economy such as Scotland, but the style of intervention required to modify and strengthen articulation is almost as important as intervention itself.

In its recommendations, the Commission therefore emphasized the need for new forms of public and private sector intervention in Scotland which 'harness the market where this is appropriate, and aim to combine the flexibility and responsiveness of a decentralized approach to economic development with the need to orchestrate public and private interests at Scottish level in line with agreed strategic priorities and objectives.'

What is clearly needed however is both much closer attention to (and much greater objectivity) in the specification of the key institutional features of development paradigms before they are commended to the rest of the world, and an appreciation that the precise mix of the model needs to be tailored to specific circumstances, and adapted rather than imitated too literally.

Conclusion and Some Stylized Facts

A first step, therefore, is to get beyond the superficial institutional characteristics of individual national, regional or sectoral models of intervention, and down to trying to establish what Moshe Syrquin (1988) has termed 'the stylized facts of institutional change and the role of institutions (broadly defined) in structural transformation.'

Not only does that allow us to deal with accusations that such models are 'culturally specific', and therefore not transferable; it moves the discussion from the descriptive to the prescriptive - what practical policy conclusions can societies anxious to accelerate the process of transition draw from studying the success of others, and how should these lessons be applied.

What is needed, in other words, is stylized analysis and a flexible 'Post Fordist' geometry of intervention. Or 'Vorsprung Durch Rethink', as Goran Therborn puts it (in Hall and Jacques (eds) (1990)).[20]

Briefly, then, in conclusion, what are some of these stylized institutional facts or empirical regularities which may apply across different contextual situations ? The list proposed below is far from comprehensive, but it may be sufficient to stimulate further discussion and research:

1. **Organize for success - only fools and knaves deny the relevance and need for planning.** The very existence of such widespread articulation networks and 'invisible handshakes' in the private sector and most successful economies is clear evidence that market failure is pervasive rather than exceptional in almost every society. Successful large companies nearly always temporarily suspend the normal laws of the market when they move strategically: small states are often justified in doing the same, provided there is sufficient awareness of the risk of government failure if interventions are not carefully designed and their impact closely monitored.

2. **The existence of a network of decentralized structures of government appear to link many of the success stories we have reviewed, and a flexible style of intervention is required to**

match the flexible geometry of articulation weakness. This has to be carried out at many different levels of society, and is therefore incompatible with the degree of centralized governmental control which marks Britain out from almost every other state in Western Europe.

Small size (as Nobel Prizewinner Simon Kuznets noticed back in 1960 and Peter Katzenstein (1985) and others have subsequently confirmed) can bring distinct advantages of agility because of short lines of internal communication, greater ease in engineering consensus and mobilising people for structural change (provided there is a degree of cultural homogeneity or national/local purpose).

Katzenstein (1985) sums this up with the celebrated analogy quoted by the Standing Commission on the Scottish Economy. Commenting on the adaptability of those small, well-articulated European states and regions which already enjoy a high degree of political autonomy and cohesion between the various social partners, he concludes:

'None of these small European states has learned to soar like an eagle. What they have learned is an amazing capacity to jump. Although they appear to land on their stomachs, in fact they land on their feet and retain the ability to jump again and again in different directions, correcting their course as they go along.

In a world of great uncertainty and high-risk choices, this is an intelligent response. Frogs can escape snakes, and the small corporatist states can continue to prosper - not because they have found a solution to the problem of change but because they have found a way to live with it.'[21]

It can also be argued, of course, that similar institutional characteristics have also contributed greatly to the economic success and versatility of larger countries such as Germany - which in this context is perhaps better viewed as a federation of smaller units (Lander) with a high degree of internal articulation and decentralized political autonomy.

3. Interventions by the state should focus (as Bryden has suggested) as much on process as on programme content, since part of the objective of intervention should be to strengthen the capacity for collective self-reliance and thus empower people and communities to develop strong and more useful articulation networks.

The role of education - particularly the Scottish philosophical approach to pedagogy which emphasizes 'learning to learn' - has an absolutely crucial role to play here, as well as in the area of factor enhancement. In the Post-Fordist technological age, increased adaptability and flexibility in the labour force is required which gives employees greater discretion over how they use their labour power (since contracts may become less fully specified); and educational approaches must equip people for exercising this greater degree of autonomy and agility. A national school curriculum which emphasizes (in the words of Mr Gradgrind in Dickens' novel 'Hard Times') 'Facts, facts, facts' will be totally inadequate in meeting this challenge.

4. Autonomy and empowerment also require control or access to resources, however, and almost all the evidence suggests that mechanisms for the appropriate allocation of credit are an essential prerequisite of economic success, and that most successful economies do not leave this entirely to the market for fear of financial disarticulation.

5. Consensus round objectives seems to be another strong feature of successful articulation, and as the Swedish writer Goran Therborn has shown the development of coalitions of common interest does not necessarily follow conventional lines of 'class solidarity'.[22] Other Post-Fordist writers have also noted how conventional interest groups can realign into flexible, shifting and often surprising new coalitions.

In many of the examples cited by Therborn, for example, interventionist measures to eliminate unemployment are pursued in the interest of stability with the active encouragement of capital even in situations where labour is in a weak bargaining position.

The overall recommendations of the Standing Commission on the Scottish Economy, to take another example, were welcomed across the political and industrial spectrum in Scotland even though they aroused fierce opposition from Scottish Ministers and other placemen appointed by the Westminster Conservative Government to undermine the more consensual partnership approach to economic management advocated by the Commission and favoured by the Scottish electorate.

6. Engineering and mobilising such a consensus may be made easier too by the existence or emergence of a strong external economic challenge, such as the greater vulnerability and exposure to the international economy that generally typifies small economies, or what Porter

(1990) calls 'selective factor disadvantage' (e.g. the absence of domestic oil reserves in Japan which helped force the emergence of Japan as a nation trading in manufactured goods).

Similarly a major adverse shock to the economic system (such as the closure of the Gartcosh Steelworks in Scotland) or, for example, the need to rebuild an economy after a war, may also help 'concentrate minds' and persuade capital and labour to submerge their traditional differences in the national or regional interest. A strong sense of national or local identity is usually an important prerequisite for this to happen, as is a local policy-making competence (preferably one under democratic control.)[23]

The provision and dissemination of objective information about policy options can also in itself often help eliminate the unnecessary disagreements, suspicion and dissent which can arize through misunderstanding and absence of communication between different social and economic partners. Indicative planning in France and the British Labour Party's plans for a 'National Economic Assessment' address this issue directly.

In the UK, however, development of much stronger, more independent and more comprehensive statistical services will be required to provide the management information necessary for such an approach to work after a decade of attacking information collection as 'unnecessary form-filling and red-tape' and manipulating statistical categories for other political and ideological reasons. It should also be borne in mind that what is not measured by official statistics in such a politicized statistical regime is often more important than what is actually measured.

In sharp contrast to the UK, popular support for the planning process in The Netherlands (which stems partly of course from the small size of the country's land area and the ever-present struggle to hold back the sea) also derives in part from the strong reputation for independence and integrity enjoyed by the Dutch statistical authorities which are charged with producing the information which forms the statistical base for public discussion of socio-economic matters. This public confidence originates in the post-War work of Tinbergen and others in establishing the Central Bureau of Statistics and an independent Statistical Commission on which 'social partners' as well as Government are represented.

7. **As noted above, there may be cyclical and spatial variations in the degree and nature of the articulation process which may be related to similar cyclical and spatial variations in**

profitability, and judgements as to the relative costs of internalising or externalising certain forms of activity. Policies which aim to strengthen or modify articulation processes must take these variations into account in designing the mix and style of intervention that the particular problem or situation demands. Shifting articulation boundaries over time and space, and between different types of industrial and socio-economic structure, demand a flexible geometry of intervention in response.[24]

Cyclical variation in articulation arrangements linked to changing profitability and labour market conditions can be illustrated, for example, in the case of child care provision by employers.

In the 1950s and 1960s in Scotland, severe shortages of skilled labour meant that employers were forced to make arrangements to facilitate the return of married women to the labour force. Indeed, part of the great development economist Arthur Lewis's seminal article on reservoirs of untapped labour ('Economic Development with Unlimited Supplies of Labour' (1955)) makes explicit reference efforts to recruit women in the Britain of the 1950s.

As was the case during the Second World War, shortages of skilled male labour during this period prompted many larger firms to establish factory nurseries, which in the case of jute firms in Dundee, for example, varied their admission policy in line with the receipt of specific orders for the company and the mix of additional skilled weaving labour such business fluctuations demanded. Most of these company nurseries had closed by the 1970s, however, since labour was by then more than sufficient to meet the reduced level of production required and attracting women re-entrants ceased to be a business priority.

When skilled labour shortages re-emerged in the late 1980s, however, not only had the childcare infrastructure disappeared, but individual companies were no longer profitable enough to be able to finance such provision on their own - hence the recent interest in collective provision of workplace nurseries which spread costs between a number of firms and, for example, local authorities.

Thus changing economic and social circumstances over the cycle may influence the degree of articulation which is likely to emerge at any particular time without public intervention or stimulus, as well as affecting nature of the public sector/private sector mix of provision that is required to deal with market failures. Of course, the important issue for women in Britain today is (as the Standing Commission on the Scottish Economy pointed out) how to devise a more stable structure of childcare provision which will not disappear when the immediate requirements of employers temporarily change.

8. The distribution and allocation of risk is an important aspect of this variability between different structural contexts which requires particular attention.

Richardson's 1972 'Economic Journal' article, for example, uses the British example of the nature of the relationship between the retail clothing store Marks and Spencer and their suppliers to illustrate an example of close but extremely profitable dependency for the companies involved. In this example, the retailer initially bore most of the risk in return for the right to issue very precise terms and instructions to their chosen suppliers (e.g. what batches were required, what yarns to use etc.) In return firms received stable orders, had to do no marketing or design themselves, and could run on Fordist principles since the nature of demand was predictable year-in year-out, and the risk was borne by the customer.

When however the market became more volatile and fashion-oriented in the 1980s, M&S's purchasing strategy changed; risk was shifted on to the suppliers who lost their guaranteed markets; were invited to submit small batch samples which they now had to design and specify themselves from which the retailer choose only what he wanted. This of course demanded a switch to much more flexible production methods, and many traditional M&S suppliers went out of business during the transition.

In similar vein, Brusco and Sabel[25] writing in an Italian context identify three different types of artisanal company, and show in each case how the degree of dependency facing these different categories of firm depends strongly on product market conditions and how risk is allocated between different parts of the articulation network to which they are connected.

10. Finally, comparative studies of economic success and transformation emphasize the long term nature of the development commitment that is generally required to achieve economic success, and the value wherever possible of building on existing institutional knowledge to shorten the institutional learning curve. Institutions can indeed ossify (as Geoff Hodgson (1989) and others have noted), and radical change may require new people, new approaches, and a changed corporate culture; but existing institutions nevertheless contain a great deal of codified information in their routines which can get lost if there is too much ill-conceived reorganization and insufficient emphasis on adaptation.

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NOTES

1 Final Report of the Standing Commission on the Scottish Economy (November 1989) (Editors: Professor Sir Kenneth Alexander and Neil Robertson) (ISBN 0 9515456 0 4) (available from the Scottish Trades Union Congress, 16 Woodlands Terrace, Glasgow G3 6DF).

See also the Commission's Interim Report (February 1988); and the Commission Working Paper on "Initiative, Innovation, Adaptation and Change in Large Firms" by David Donald, Policy Analysis Research Unit, Glasgow Polytechnic.

The independent Commission - launched on the initiative of Strathclyde Regional Council and the Scottish Trades Union Congress who called a Scottish Economic Summit Conference in July 1986 to set it up - was chaired by Professor Sir Kenneth Alexander, and brought together representatives from most of the "social partners" in Scotland (local authorities, trade unions, churches, the business community, the voluntary sector, farmers, the media, development agencies and the academic community) and during its three-year life acted as a semi-official "sounding board" for policies, analysis and ideas relevant to the development of the Scottish economy.

The establishment of this body was in itself an interesting example of the emergence of a strong, non-governmental articulation network in response to the wave of closures in traditional manufacturing industries which swept across Scotland in the mid-1980's and growing concern that increased centralisation would inhibit Scotland's prospects for economic recovery. As a number of commentators observed at the time, such developments would have been impossible in any other part of the United Kingdom outside Scotland during the period of the Thatcher Government.

2 By David Donald, Alan Hutton and others associated with the Policy Analysis Research Unit at Glasgow Polytechnic.

3 The phrase is Arthur Okun's. Krugman (1990) is one of the principal exponents of strategic trade theory.

4 In Hall and Jacques (eds) (1989).

5 See Van Dijck (1988) who discusses the importance of intermediate institutions in the case of South Korea, and also attempts to isolate 'stylized' cultural facts which are present in Confucian ethics, but are also features of what superficially seem to be very different cultural contexts.

6 In remarks made at the launch of the Dutch/Flemish Chapter of Economen Voor Vrede, Rotterdam City Hall, 1990.

7 See Fitzgerald and Wuyts.

8 See 'Artisan Production and Economic Growth' by Sebastiano Brusco and Charles Sabel in 'The Dynamics of Labour Market Segmentation' edited by Frank Wilkinson (1981).

9 Despite its geographical 'peripherality', Sakaki has becomee a world leader in the flexible production of general purpose numerically-controlled machine tools. See David Friedman's 'The Misunderstood Miracle: Industrial Development and Political Change in Japan' (1988) quoted by Donald (1989).

10 See Commission Working Paper on 'The Roles of Chambers of Commerce in Contemporary European Economies', David Donald and Jacqueline Gilmour, Policy Analysis Research Unit, Glasgow Polytechnic. This drew inter alia on the early findings of research comparing the network of articulation support available in Kilmarnock in Scotland with that provided by the Chamber of Commerce in its twin town of Ales in France.

11 See box on 'The Nordic Model' in the 1989 World Bank Report on Sub-Saharan Africa.

12 A reasonably full German language description and guide running to over 250 pages is Wittek (1990).

13 As Mihir Bose pointed out in 'The Independent' 9th June 1990, these guilds also existed in the DDR, and many now see them as playing key role as the economies have combined.

14 See 'Cahiers Francais' Oct/Dec 1989 'Strategies Industrielles Mondiales'.

15 'L'Allemagne et L'Europe Face aux Unions Monetaires' by Roger De Weck (Chief Economic Correspondent of 'Die Zeit') writing in 'Liberation' 5th April 1991.

16 For details, see report in 'Der Spiegel', April 1991.

17 A large and important part of the two Standing Commission Reports is given over to a comprehensive critique of the flaws of the new system, even though practical suggestions about how to minimize the damage caused by this ill-conceived reorganisation of industry and training support are also included. These constructive suggestions have so far, however, found little favour with the Government which is attempting to press on regardless in the face of mounting concern, not least from those private sector industrialists who have been given the responsibility to make sense of the mess.

Scotland's industrial and training preparations for the European Internal Market in 1992 are also likely to be disrupted further by the removal of further education provision from local government control (breaking vital articulation links between schools, colleges and the local communities), and by the decision to reorganise local government in Scotland without any consultation or independent investigation as to what structures make sense.

Both these initiatives are depressing examples of what in Scotland is clearly seen as a Menshevik Government (enjoying only around 20% support North of the Border at the last election) using Bolshevik tactics (permitted by the UK's non-proportional electoral system and the 40% support across Britain which gives it a massive parliamentary majority in Westminster) to smash Scotland's already weak institutions of economic articulation and democratic expression, and in the process turn Britain into the most centralised, disarticulated — and correspondingly inefficient — economy in the whole of Western Europe.

18 Similar conclusions emphasising the importance of the regional and microeconomic dimensions of macropolicy emerged from work for the Commission undertaken by Professor David Vines and David Bell at Glasgow University, which is summarised in both the Interim and Final Commission Reports; from evidence contributed by Sheila Dow of Stirling

University on the regional dimensions of monetary policy; and from the Commission Working Paper 'Some Reflections on the Discriminatory Impact of Interest Rate Changes on Regional Economies - the Scottish Dimension' by Alistair Lonie and David Power of the Department of Accountancy and Business Finance at Dundee University.

19 Universite Catholique de Louvain: Association RIDER-IRES, 'Socio-Economic Consequences for the Traditional Industrial Regions of the European Community Arising from the Completion of The Single Market' (October 1990).

20 See 'Fordism and Post-Fordism' by Robin Murray; 'Vorsprung Durch Rethink' by Goran Therborn; and other contributions in 'New Times: The Changing Face of Politics in the 1990s' edited by Stuart Hall and Martin Jacques (1990).

21 Peter J. Katzenstein, 'Small States in World Markets: Industrial Policy in Europe', Cornell University Press (1985).

22 Goran Therborn, 'Why Some Peoples Are More Unemployed Than Others: The Strange Paradox of Growth and Unemployment', Verso (1986).

23 The failure of the Scottish Office (a branch of central government based in Edinburgh but completely under Westminster ministerial control) to make any serious preparations for the completion of the Internal European market in 1992 despite presistent representations on this matter from Scottish public opinion emphasises the importance of democratic accountability.

24 Joseph Stiglitz (1986) begins to explore similar institutional variations in a developing country context in 'The New Development Economics', World Development, Vol. 14, No. 2 (1986), reprinted in Wilber, C.K. (ed.), 'The Political Economy of Development and Underdevelopment' (4th edition) (1988).

25 Sebastiano Brusco and Charles Sabel, 'Artisan Production and Economic Growth", in "The Dynamics of Labour Market Segmentation' edited by Frank Wilkinson (1981).

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