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Embedding the 'New Economy' in Europe: A Study in the Institutional Specificities of Knowledge-Based Growth

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Abstract

Aspirations for a 'new economy' currently feature prominently in the economic policy debate within the EU. So pronounced is elite interest in the 'new economy' that the issue of knowledge-based growth dominated the Special European Council organised for Lisbon in May 2000. However, the Presidency Conclusions to that Council failed to address the question of whether the European economy is institutionally compatible with knowledge-based growth. The 'new economy' is currently most developed within the United States, and the institutional specificities of the American high-tech sector suggest that it may be impossible to simply import the 'new economy' into Europe. The EU may lack both the labour market and the capital market conditions necessary for successfully embedding the 'new economy' in Europe.

Keywords

'new economy'; Lisbon; labour market flexibility; 'European Social Model'; capital market segmentation; venture capital

Embedding the 'New Economy' in Europe:

A Study in the Institutional Specificities of Knowledge-Based Growth

The health and vitality of the American economy was increasingly envied by Europeans in the later 1990s. From the perspective of the EU, where the macroeconomic and labour market effects of the Maastricht Treaty have led to a decade of truncated growth and persistent unemployment, the performance of the American economy appears impressive. Talk of an emerging 'new economy' encouraged claims that the US had entered a period of sustainable non-inflationary growth, with the natural rate of unemployment lowered to a level last witnessed in the 1960s and the business cycle eliminated. The stock market crash and tech downturn cast doubt on these beliefs after the summer of 2000. But, up to that point, it was widely believed that the United States was structurally out-performing Europe because America had a 'new economy' rooted in a techno-economic paradigm based on information-intensive production systems which Europe lacked (see Freeman and Soete 1994). Such perceptions had a significant influence on the agenda of the Lisbon Special European Council held in May 2000. The aspiration animating the Lisbon Council was that Europe should be seeking to embed a US-style 'new economy' if it was to hope to emulate America's recent growth performance.

If subsequent events have already discredited such a view, there is nevertheless room for an article which provides an intellectual critique of that agenda and its underlying assumptions. The Council failed to move beyond the level of aspiration to suggest a realistic strategy through which its aspirations could be realised in practice. More fundamentally, this article argues that it would be impossible to implement such a strategy without first redefining the social structure of accumulation in which the European economy is currently situated. The 'new economy' could only be embedded in Europe after a series of long-term institutional reforms had re-shaped the very essence of the European growth model by successfully surmounting the political resistance which would be mobilised by a range of social groups seeking to preserve the status quo. The implication is that the 'new economy' is no quick fix for Europe's continuing unemployment problem and there is no guarantee that attempts to embed a 'new economy' within the context of political resistance would not have the adverse consequence of exacerbating existing tendencies towards unemployment.

This argument rests on one core claim: the success of the 'new economy' in the United States is embedded in particular kinds of labour regulation and financial market regimes which Europe does not have and Europe's

citizens may not wish to have. This claim is illustrated, developed and analysed in the two main sections of the article, which deal successively with labour and capital market specificities. The first section argues that Europe currently does not have a labour market structure compatible with the US degree of labour market flexibility, and Europe's political leaders in various countries differ about whether they wish to have such a labour market structure. The second section observes that the US 'new economy' is rooted within a financial market structure which is highly facilitative of entrepreneurship. 'New economy' start-ups are funded by America's venture capital markets which are deeply integrated into its wider stock market structure, which in turn provides adequate 'exit mechanisms' for venture capitalists to sell on successful start-ups (see Gompers and Lerner 2000). By way of contrast, Europe's venture capital markets are less developed, operate along national rather than 'European' lines and are poorly integrated into the wider stock market structure. The overall argument is that 'Europe' cannot be the relevant social or financial space for embedding the 'new economy' as long as Europe's labour and stock markets retain anything like their existing character.

(1) American labour market specificities and prospects for adapting European social institutions

Under the direction of the Portuguese Presidency, a Special European Council was held, in May 2000, in Lisbon. Its stated aim was to deepen dialogue amongst the member states on the themes of employment, economic relations and social cohesion (Portuguese Presidency of the Council of the European Union 2000). These themes were first institutionalised as an integral feature of EU governance norms at the Luxembourg Summit of 1997. However, unlike the discussion of these norms at earlier European Councils from Luxembourg to Cologne, the Lisbon Summit was the first to address directly and explicitly the future of the 'European Social Model' in a context of economic globalisation. Whilst the ostensible aim of the Council had been to examine the relationship between the labour market and social policy as part of a broader strategy to 'renew', 'revitalise' or 'modernise' the 'European Social Model', by the time of the Summit itself the nominal agenda had shifted subtly. As even a cursory reading of the Presidential Conclusions makes clear, it eventually concentrated on Europe's adaptation to the competitive imperatives of an increasingly 'knowledge-driven' economy.

For the British press at least, Lisbon was popularly christened the 'dotcom Summit'. It took place, ironically, just as public perceptions were hardening that the tech stock bubble had driven 'new economy' share prices to

unsustainable heights. Nevertheless, the agenda for the Summit was determined prior to the tech stock crash, against a background of resonant images which attested to the apparent vitality of the 'new economy'. Prior to the crash, the 'new economy' elicited overwhelmingly positive connotations. In the absence of such images, it is unlikely that the Lisbon agenda would have focused quite so explicitly on the exigencies of knowledge-based growth or have assumed so easily that the 'new economy' would be unequivocally good for Europe. Beyond this, the focus was blurred because substantive analyses of the 'new economy' – and, in particular, of the relationship between Europe's existing growth model and the 'new economy' – were limited both in number and in analytical scope.

Debates about the future of the European economy are currently dominated by three key issues: ii the impact of 'globalisation' (see Boix 1998; Garrett 1998a); the ability to reproduce the 'European Social Model' (see Iversen 1999; Dyson 2000); and the demands of the 'new economy' (see Heller 1998). However, discussion of these issues has led to three discrete academic literatures, such that the relationship between the issues remains far from clear and the causal relations between them can be set up in several different ways.

- The successful importation of the 'new economy' could raise the trend rate of European growth, thus reinvigorating the fiscal basis of the 'European Social Model' which would otherwise be undermined by conditions of 'globalisation'.
- The political desire to defend the 'European Social Model' could itself impede the successful importation of the 'new economy', diminishing global competitiveness and hence eroding the economic foundations on which that model currently stands.
- The introduction of the 'new economy' could be the means through which Europe is exposed to pressures for global economic convergence, thus dissolving the domestic conditions for the 'European Social Model'.

The literatures on the three key issues cannot easily be engaged in dialogue because each literature is grounded in a rather different understanding of the economic process. The different literatures thus tend to talk past one another rather than talk to one another.

• The literature on 'globalisation' tends to focus on changing patterns of trade and investment between countries (see, for example, Hirst and Thompson 1996; Wade 1996). Thus, the nature of economic activity is here conceptualised primarily in terms of exchange relations.

- The latest additions to the literature on the 'European Social Model' tend to focus on the labour market conditions of growth within Europe (see, for example, Schmitter 1997; Beetham and Lord 1998). Thus, the nature of economic activity is here conceptualised primarily in terms of social relations.
- The literature on the 'new economy' tends to focus on the impact on productivity rates of the incorporation of recent technological developments (see, for example, Kelly 1998). Thus, the nature of economic activity is here conceptualised primarily in terms of production relations.

In reality, modern market economies are constituted through the complex combination of all these relations (and others). The problem is that this fairly obvious point about complexity is effectively denied in much of the existing literature on the 'new economy', which simply links future growth rates to the extent to which 'new economy' technologies have penetrated existing production systems. As such, we are implicitly presented with a production function in which technology is the only variable, and with explanations of growth that focus simply on technological dynamism. By contrast, we can choose to set our understanding of the 'new economy' within an alternative theoretical framework that acknowledges the wider social determinants of modern production techniques. The 'new economy' and US-style knowledge-based growth then appear as more complex phenomena which are not easily transposed into other social contexts and which, under certain socio-political conditions, may be potentially contradictory.

This alternative, socially determined view of technology is grounded in the long tradition of political economy scholarship which focuses on the 'social embeddedness' of economic practices (for a sample of this literature, see Shonfield 1965; Goldthorpe 1984; Kitschelt et al 1999). From this perspective, the impact of technology on production is mediated by its effect on the underlying social structure in which the production process is situated. Technological innovation enhances productivity potentials most strongly when the introduction of new technologies into the production process complements existing patterns of socialisation into embedded social hierarchies. The relationship between technological innovation and economic growth is rather more problematic when the introduction of new technologies disrupts existing social norms and enforces new expectations in labour market institutions and welfare state regimes.

This last point is important because the production process within modern market economies must be viewed as a complex set of social relations (see Jessop 1990), within which actors create 'value' in two distinct ways. Firstly, they create 'economic value' by establishing price-quantity-quality schedules that determine the manner in which goods and services are traded. Secondly, they create 'social value' by generating resources which can be used to provide social status through enhanced consumption possibilities. The 'social value' that workers create through the production process has historically been augmented within Europe by de-commodifying welfare state regimes, through which individuals have been granted social status above and beyond that which they can gain from purely labour market-based activities (Goodin et al 1999). Throughout the post-war period, citizens across Europe have been socialised into embedded social hierarchies within a context bounded by welfare states established on the principles of labour de-commodification (Esping-Andersen 1999).

These political economy arguments have clear implications for our understanding of attempts to import a US-style 'new economy' into Europe. The 'new economy' can be seen as an unequivocal social good, only insofar as technological innovation within the European production process clearly complements existing labour market institutions and welfare regimes. But the argument of this article is that this basic precondition is not met. We must therefore assess the compatibility of existing types of labour market and welfare state regimes with 'new economy' production processes and consider the distributional effects between different social groups – both within and between national economic spaces – that the introduction of the 'new economy' implies. In this way, it becomes possible to transcend a narrow economic focus on productivity and growth rates and assess the likely overall impact of the widespread incorporation of the 'new economy' in Europe.

Issues relating to labour market and welfare state regimes are generally overlooked in the existing literature on the 'new economy' (see, for instance, Kelly 1998; Burton-Jones 1999; Leadbetter 1999; Seltzer 1999). These texts are written from an unselfconsciously Panglossian perspective in which the information technology revolution allows everyone to enjoy the best of all worlds so that the 'new economy' is some sort of productivity 'free lunch'. In other words, recent advances in information technology systems are sufficient in themselves to deliver productivity increases, regardless of existing labour market standards. Against this, the political economist's 'embeddedness' argument is simply that no amount of technological innovation is ever sufficient to drive productivity increases on its own, unless existing labour market conditions are conducive to the assimilation and operation of that technology (see Romer 1990).

In practice, the main issue here concerns the scope for firm adjustment to fluctuations in demand. This would remain an issue for certain sectors even if, as in the most optimistic interpretations of recent US knowledge-based growth, the 'new economy' were to eliminate the macro business cycle. For 'new economy' processes to increase underlying levels of productivity irrespective of wider market conditions, firms require sufficient operational autonomy from organised social partners in the production process to be able to respond quickly to downturns in product demand (see *The Economist*, 10.02.01). Much of the literature on the 'new economy' assumes that firms can use recent technological advances to predict consumer demand with a high degree of accuracy (see, for instance, Kelly 1998; Leadbetter 1999). Faced by a downturn in demand, firms could adjust production without any detrimental effects on productivity and avoid building up excessive inventories of spare stocks provided they could reduce external purchases and downsize the internal workforce. In the 'new economy', as in the old economy, adjusting production runs during downturns in demand means laying-off workers inside and outside the firm. As such, 'new economy' processes would seem best suited to labour market regimes that are lightly regulated and that contain a limited number of potential sites of opposition to 'hire-and-fire' employment practices.

From this point of view, the European economy currently does not contain labour market institutions capable of exploiting the full technical potential of 'new economy' processes. Despite recent processes of labour market reform at the national level in Europe (see Compston 1997), the EU clearly does not have US-style labour markets. Moreover, there is also an emerging EU-level discourse about the need for supranational labour market reform that focuses on the possibility of introducing new layers of progressive regulation (see Teague 1999). This suggests that the EU is unlikely to have US-style deregulated labour markets any time in the near future. The contrast with the United States is instructive because there we have strong economic performance associated with a flexibilised labour market and an unequal division of rewards.

At the end of the 1990s, after eight years of sustained economic upturn, the US was experiencing minimal upward pressure on prices from wage inflation (*Business Week*, 22.02.99: 16). Productivity gains from 'new economy' processes have been buttressed by the absence of the inflationary tendencies previously characteristic of labour market tightening. As the upturn gathered pace, Alice Rivlin, Alan Greenspan's former deputy at the Federal Reserve, told Congress that the Federal Open Market Committee was "frankly surprised" that the

economy had been able to accommodate historically high growth rates without at the same time generating more pronounced inflationary pressures (Rivlin 1997: 749). This sense of surprise has led many Federal Reserve members to speculate openly on the possibility that structural change within the economy may have lowered the 'natural rate of unemployment' by making the economy systematically less inflation-prone (see especially Meyer 1997).

The evidence for such a shift is as yet inconclusive, but the evidence on structural change in the American labour market is more clear-cut. The upturn of the 1990s rests on the prior institutionalisation of new forms of wage discipline within American society (see Moseley 1999). For those employed outside the primary segments of the American labour market, the costs of the 'new economy' have been socialised in the form of a more coercive labour market regime. The Fed has openly acknowledged that the flipside of the efficiency gains that the 'new economy' has delivered is increased job insecurity and limited wage growth (Greenspan 1997: 744).

The US 'new economy' builds upon particular human capital creation structures organised around a bifurcated education system that provides high skill levels for some and low skill levels for others. This leads to two groups of workers operating within strictly segmented labour markets (Piore and Sabel 1984; Galbraith 1992). Whilst each might be said to experience labour market 'flexibility', they do so on vastly different terms. For those with high skill levels, constant demand for productivity-enhancing expertise leads to voluntary redeployment within the labour market. For those with low skill levels, the structure of the labour market regime provides a context within which they may have to spend their whole lives in unprotected employment performing casual tasks. If the experience of those in the former group can be seen as the up-side of the 'new economy', the experience of those in the latter group should be seen as its down-side. Moreover, it is important to be aware that it is impossible to have one without the other: enforcing the negative consequences of 'flexible' labour markets on some is a functional necessity of allowing others to enjoy their benefits.

Certainly, the 'feel-good' effects of the American economic expansion of the 1990s were experienced asymmetrically. Much of that expansion was consumption-led, and much of the new consumption possibilities were opened up by capital gains resulting from a bullish stock market. Indeed, so pronounced was the stock market effect that spending financed through capital gains accounted for the equivalent of almost 50% of the

American economy's growth rate in 1998 (*Financial Times*, 29.05.99). Yet, around 40% of the market's capital gains throughout the 1990s were concentrated in the hands of the wealthiest 1% of the population (*Business Week*, 05.04.99: 50). By contrast, for those who financed consumption through wages rather than wealth, wage increases were at best modest in most sectors (*Business Week*, 03.05.99: 102; Brenner 2000). The real median wage in the United States was below its pre-expansion 1989 level even as the expansion was in full flow in 1998 (Reich 1998). Moreover, if we choose to look below the median wage rate, the picture of labour market segmentation looks even starker. Despite a sustained period of historically high growth rates, the absolute wages of the bottom decile of the in-work population remained lower throughout the expansion than they were in 1979 (Crouch 1997: 370).

The introduction of similar labour market dynamics into the European economy would clearly constitute a direct challenge to the post-war European tradition of welfare capitalism. The labour market conditions in which the US-style 'new economy' is embedded imply a conception of social citizenship that is antithetical to the dominant pattern of political mobilisation within Europe. Labour market structures that produce more egalitarian effects than those in the United States continue to court political popularity in Europe (Borre and Scarborough 1995). However, this does not necessarily imply concerted resistance to the 'new economy' in Europe and, in particular, to the labour market reform that the 'new economy' implies. For, a key question animating contemporary public discourse in Europe is whether its political leaders remain sufficiently empowered *to* resist the wholesale liberalisation of their labour markets which would align them with the US model.

The discussion of a European 'new economy' is currently being played out against the backdrop of a very public debate about the future of the 'European Social Model' more generally (on that debate see, for instance, Kitschelt 1994; Scharpf 1999). Much of that debate revolves around the crucial issue of the extent to which the European economy is caught between, on the one hand, a social market that is becoming economically unsustainable given the wider context of increased national interdependence and, on the other, pressures for market liberalisation that are politically unpalatable given prevailing patterns of socialisation into the economic structure through the welfare state. The legitimacy of the domestic political system throughout the EU is intimately tied to the ability of the welfare state regime to provide the material resources necessary for reproducing existing forms of social citizenship. Yet, much of the literature now points to the way in which the

increasing penetration of the domestic economy by potentially mobile units of capital has undermined the fiscal basis of the welfare state regime. Significantly, this has occurred at the same time that demographic trends, coupled with the persistence of post-Maastricht unemployment, has increased the demand for social protection to unprecedented heights.

As Maurizio Ferrera and Martin Rhodes suggest, "the roots of [the EU's] current welfare predicament are primarily internal" (Ferrera and Rhodes 2000: 259). The success of welfare states in the post-war period has generated new budgetary pressures in the form of rising health care and pension costs, against a background of less secure patterns of employment within the service sector (Iversen and Wren 1998). The creation of service sector jobs within the EU has tended to vary according to the prevailing rate of non-wage costs, in particular those associated with contributory payments to publicly funded social insurance schemes (Wieczorek 1995). The expansion of employment opportunities within the service sector has typically been more constrained the higher the contributory payments – in other words, the greater the attempt to meet increasing demand for social spending.

Such pressures are exacerbated by changes in the wider economic environment brought about by the process of European integration. The image of 'globalisation' is often invoked in order to explain the external constraints faced by welfare states (see, for instance, Cerny 1997), but the most important aspect of structural economic change for all EU economies is European rather than global in nature. The intensity of intra-EU trade has grown markedly in recent years (Garrett 1998b; Gros and Thygesen 1998; Wallace 2000). As a consequence, the market share of domestic firms has become increasingly sensitive to competition between different regulatory regimes within the Union. Any attempt to gain a competitive advantage at the expense of another member state's more generous social provision is likely to erode both the fiscal basis of the existing welfare state regime and the labour market conditions of welfare capitalism more generally (Rhodes 2000).

The context for competition between different regulatory regimes within the EU is set by the Treaty requirements governing the process of Economic and Monetary Union (EMU). There are two broad institutional impacts of EMU on the embedded social norms of European welfare capitalism. Firstly, and perhaps most obviously, the formal apparatus of the European Central Bank and the Growth and Stability Pact places definite limits on the macroeconomic independence of all member states. In particular, governments

have had their autonomous revenue raising capacities curtailed by their commitment to a series of politically rigorous, albeit economically arbitrary, monetary targets (on the nature of which, see Buiter, Corsetti and Roubini 1992/3). In such circumstances, government revenues become ever more reliant on the ability to retain potentially mobile factors of production within the domestic economy. Yet, the issue of retention has increasingly come to be understood as a function of bidding down non-wage costs of production under conditions of regulatory competition (Rhodes 2000).

Secondly, the impact of EMU is perhaps more marked in terms of its effects on the behavioural patterns of economic actors within the private sector and, in particular, firms. The single currency has been introduced within the context of prior single capital market legislation, and these prior changes have altered the incentives faced by firms to continue to reproduce their existing mode of corporate governance. It is at the microeconomic level, then, that the effects of EMU on the 'European Social Model' are likely to be most pronounced, because national variants of that model are rooted in distinct types of corporate governance.

The available empirical indicators suggest that a significant inverse relationship holds between the exposure of European economies to capital-market based corporate governance and labour market adjustment time to adverse demand shocks (Barrell, Pain and Young 1996: 638). In other words, those European economies whose corporate governance norms are shaped most clearly by capital market-based investment decisions also have labour markets which adjust most quickly to cyclical downturns. As such, the microeconomics of EMU, and in particular the forced exposure of all European firms to single capital market legislation, are likely to make it progressively more difficult for firms to adopt a labour market strategy which acts as a form of social protection when the economy experiences adverse demand shocks.

Of course, none of these contextual factors and pressures means that the European Union currently has US-style labour markets, nor is likely to any time in the near future. The move to capital market-based forms of corporate governance, as in France (Morin 2000), does ensure that the *trajectory* of labour market reform within the EU – however tentative at present – is in the direction of the American model. In this respect, European labour markets are likely to become more compatible with a US-style 'new economy' regardless of the European Council's 'new economy' strategy. Yet, although European labour markets are subject to pressures for change, the current specificities of the labour market prevent Europe simply from importing a US-style 'new

economy'. Moreover, the extent of labour market reform which such a process requires far exceeds that to which either European governments or the electorates they represent are currently willing to consent.

Liberalising labour market reforms have been catalysed by recent EU capital market legislation and the academic literature celebrates the creation at Maastricht of a 'single' European capital market. Nevertheless, Europe's capital markets remain poorly integrated both across sector and across country and these differences in financial conditions impose further structural impediments which will make it more difficult for Europe to emulate the trajectory of recent US knowledge-based growth. In other words, there are capital market specificities (as well as labour market specificities) of a US-style 'new economy'.

(2) US capital market specificities and continued capital market segmentation in the EU

The academic literature on financial integration in Europe is written mainly by academic economists who tend to operate with two rather different measures of integration (for a review of the literature, see Bayoumi 1997). Firstly, there are those who focus on *de jure* measures of integration. Here, the aim is to map the changing intensity of formal capital controls between countries, and barriers to the creation of a true internal market for financial services are understood simply as the persistence of such controls. Secondly, there are those who focus on *de facto* measures of integration. Here, the aim is to assess whether the provision of the legal conditions for a single European capital market within the Maastricht Treaty has led to the harmonisation of operating standards across all national capital markets within Europe. Set in this context, the degree of financial integration is measured by the extent to which regulatory harmonisation has eliminated transaction costs when trading between two national markets. Barriers to the creation of a true internal market for financial services are consequently understood as the persistence of transaction costs.

The following analysis is written from the perspective that the 'transaction costs' measure provides a more informative indicator of the extent of financial integration in Europe than does the 'capital controls' measure. This is particularly true in relation to the current discussion. Should Europe's financial system constrain the

successful capitalisation of a European 'new economy', this is more likely to be the result of persistent transaction costs than persistent capital controls.

The Presidential Conclusions of the Lisbon Special European Council highlighted two aspects of future reform which would further embed prior single capital market legislation as part of the everyday practice of European finance. Firstly, they noted the need for changes to the underlying market structure at the regional level in order to eliminate all remaining capital controls. Secondly, they noted the need for changes to the internal operation of individual financial markets within the EU in order to eliminate cross-border transaction costs. A number of priorities were identified which together sought to promote "efficient and transparent financial markets" both in law and in practice (Portuguese Presidency of the Council of the European Union 2000: 7). Such initiatives were presented as a means of accelerating the completion of a true internal market for all financial services across the EU (ibid).

This effective concession of earlier failures to complete the internal market rests uneasily alongside the implicit assumption in official EU discourse that the 'new economy' can simply be transplanted from America to Europe. Capital markets in the US are significantly more integrated than are those in the EU (Steil et al 1996). This is true across sector, between the venture capital and the equity market; just as it is true across space, between different localities within the respective regional economies. The absence of such integration is likely to impede the development of the 'new economy' within Europe. At the very least, it is likely to induce pockets of knowledge-based growth within more general conditions of continuing 'info-exclusion'.

Moreover, the EU would seem to possess few resources other than moral suasion in attempting to create truly pan-European access to equity financing for successful 'new economy' start-ups. Europe's stock markets have traditionally been demarcated along strict member state lines (Tirez 1997), and the depth of existing forms of equity financing differs from one national market to another (Steil et al 1996). Recent proposals for exchange merger and market takeover seem sure to reconfigure the existing structure of Europe's equity financing market some time in the future. The final form that this structure will take is as yet unclear; however, none of the existing proposals envisage a model of integration consistent with a truly single stock market for the European Union. The EU may well have asserted the desirability of such an outcome, but it has thus far adopted the stance of a merely interested bystander in the process of exchange merger. Despite its frequent protestations to

the contrary, in no sense can it be understood as a key actor in the creation of Europe's new financial order.

Rather, responsibility for identifying potential merger partners has remained with the Boards of Directors of the individual national exchanges.

At the time of the Lisbon conference, two quite distinct merger trends were apparent as the EU's stock markets polarised around two groupings. First to formalise interim agreements, which have subsequently been ratified, were the Amsterdam, Brussels and Paris exchanges. They have merged to form Euronext. At the time of Lisbon, the respective Boards of the London Stock Exchange and Frankfurt's Deutsche Börse were also seeking membership support for full merger to form the International Exchange (iX). Whilst subsequent events seem to show that this merger will not be realised because of irreconcilable differences between the two Boards, an appreciation of the merger proposals remains highly instructive. It sheds considerable light on the motivations underpinning the merger process. The opening of European capital markets to cross-border interdependencies is less the result of a desire to create a truly European space for the 'new economy' and more the result of political opportunism by bourse managers. 'Europe' cannot be the relevant financial space for embedding the 'new economy', so long as the EU has enclosed national capital markets or a capital market opening process that is designed to create powerful international alliances rather than a supranational market structure.

The merger of two or more domestic exchanges leads to a situation in which market liquidity is selectively pooled across borders. However, the creation of additional liquidity on its own is not a sufficient condition for ensuring that market access becomes any less bound by the 'national' characteristics of domestic exchanges – either for individual investors or for companies seeking to use stock markets to capitalise successful 'start-ups'. It is important to recognise that Europe's large investment banks played a proactive role in encouraging merger talks, and at no stage in any of those talks were the banks pushing for the creation of a truly supranational exchange. The banks' concerns were that existing levels of liquidity within domestic exchanges were inadequate to guarantee ever more competitive brokerage margins between bid and offer prices (www.bbc.co.uk/news, 03.05.00). Pooled liquidity was deemed necessary to provide the leverage to lower transaction costs associated with brokers' market-making influence. This would have done nothing to alter the basic underlying national structure of existing exchanges. The concerns of the large investment banks centred on reconstituting trading relations within national exchanges rather than those between them.

Much of the academic literature on the political economy of globalisation already assumes the existence of a fully operative 24-hour global capital market. As such, it is readily accepted that the markets of the key American, Asian and European time zones are integrated into a single system (see, for instance, Greider 1997; O'Brien 1992). All OECD countries have certainly taken steps to dismantle the capital controls of the Bretton Woods era, and the image of a fully integrated global capital market would be accurate were integration merely a matter of establishing the legal right to engage in cross-border transactions. However, there is more to the issue of financial integration than this. For a start, the extent of integration in practice is a function of investors' access to trade in shares other than those that are listed on their domestic exchanges. Yet, even within a context bounded by single capital market legislation, only around 10% of publicly listed European companies are listed on more than one domestic exchange (*The Economist* 20.04.00). As it is common for traders to have a single home base for their operations, this immediately reduces the capacity to engage in anything other than 'national' trades. As only around 10% of the capital of European firms is owned by non-national investors (Morin 2000), it would not be unreasonable to conclude that 'Europe' does not exist as a financial space other than as an aggregation of distinctively national markets.

Moreover, even when access to trading in non-national shares is not prohibited, the persistence of cross-border transaction costs reduces the incentives to engage in such trades. As yet, the Maastricht Treaty has had only a limited impact in terms of eliminating a number of internal market rigidities. The most significant such rigidity occurs once potential trades have been agreed and is located within the clearing and settlement system. The EU currently has more than a dozen share settlement organisations (*The Economist*, 23.09.00: 20). Cross-border trades that require exposure to multiple settlement organisations are substantially more costly than those that can be performed 'in-house' within a single settlement jurisdiction. Most of Europe's settlement organisations are subsidiaries of national exchanges (ibid), a fact that reinforces the national bias inherent in the current stock market structure. Agreements have been reached within the context of exchange merger proposals for national settlement organisations to work collaboratively to reduce cross-border settlement costs between exchanges. However, those agreements have still fallen short of proposing to cut settlement costs between exchanges to the level of those within them (www.guardianunlimited.co.uk, 09.05.00). As a consequence, investors currently experience a system in which their national location continues to have an important conditioning effect both on the route to settlement and, accordingly, on the nature of the stock being traded.

In the absence of a single supranational exchange for Europe, the elimination of cross-border transaction costs initially requires regulatory harmonisation between national exchanges. However, national regulators have already mobilised political opposition to regulatory harmonisation. For example, Britain's Financial Services Authority (FSA), which would have the power of veto over any new jurisdictional framework for stock market activity, has indicated that it favours a persistent national bias in stock market rules, due to the need to maintain "existing market integrity" (www.fsa.gov.uk, Press Release #82/2000). Howard Davies, the FSA's chair, has argued against the introduction of supranational regulation at the EU level, stating instead his preference for cooperation between the relevant authorities of member states (Davies 2000).

The argument so far shows that Europe's stock markets have an overwhelmingly national character and this has implications for the likely shape of its 'new economy'. If the EU were to emulate the American pattern of the 1990s, the success of Europe's 'new economy' would depend on the profitable flotation of its high-tech firms which would allow 'exit' and profit-taking by venture capitalists. Yet, there is unlikely to be anything particularly 'European' about any such process of flotation and 'exit'. If such a process took place with increasing intensity across a range of EU economies, the lack of integration of EU stock markets means that we would be witnessing a number of emergent national 'new economies' rather than a European 'new economy' per se. Some of those national new economies would be more developed than others because those countries with more deeply capitalised stock markets are better able to provide equity financing for companies, whether 'old' or 'new'. Ceteris paribus, it is to be expected that the continued flow of capital into successful 'new economy' start-ups will be strongest in these countries. Given prevailing financing trends within the 'new economy', the existence of a deeply capitalised 'blue-chip' market may be a particularly important determinant of future knowledge-based growth.

The bursting of the tech stock bubble does, of course, change our perspective on US success; the article by Froud et al. in this issue discusses the limits and weaknesses of the venture capital cycle. But this change of perspective does not alter the basic conclusion about how those nations with more developed capital markets have an advantage in a fragmented European space where 'new economy' companies increasingly rely on support from old economy companies. *The Economist* has recently noted (05.08.00: 15) that the most immediate effect of the end of the high-tech share bubble has been a "crisis of capitalisation" within Europe's 'new economy' sectors. It predicted an extended period of consolidation, in which 'new economy' companies

would be reliant on investment funds flowing from established firms if they were to survive the more bearish stock market environment following a successful flotation. In a similar vein, the second annual Internet Summit held in the summer of 2000 concluded with the prediction that the 'new economy' will increasingly split into the 'haves' and the 'have nots' (www.cbs.marketwatch.com, 25.07.00). The 'have nots' are those companies who cannot draw on the income streams of established 'blue-chip' firms through the mediating influence of large investment banks. It is assumed that their future investment activity will more likely be constrained by the emergence of a more risk-averse attitude within the stock market in general. The 'haves' are those companies whose future is no longer tied solely to investor confidence in the 'new economy', because they can also count upon guaranteed sources of funding from elsewhere in the 'old' economy.

The EU's Lisbon council took up the image of an autonomous 'dotcom' sector which was commonplace in the late 1990s. Much of the literature on the 'new economy' also subscribed to this image (see, for instance, Kelly 1998; Burton-Jones 1999; Leadbetter 1999; Seltzer 1999). That literature tends to focus solely on the relationship between technology and production. It asserts that technological developments have reconstituted the whole nature of the production process and concludes that, as 'old' and 'new' economies are grounded in very different production systems, their (independent) operations will increasingly diverge over time. Such conclusions ignore the way in which producers are themselves embedded within particular financial relations. Specifically, it fails to assess the financial relationship between 'old' and 'new' economy firms and, especially, the possibility of increasing financial dependence of the latter on the former. The very idea of a 'new economy' may be open to question should 'new economy' firms simply become financial subsidiaries of existing firms.

Regardless of the outcome on interrelations between old and new, the Lisbon Council's image of broadly homogeneous knowledge-based growth across the European space is highly questionable. As has been demonstrated, despite frequent claims within the globalisation literature that the whole world now exists within a single integrated financial structure, no such structure exists even within the European Union. There is no single European pool of savings to which all of Europe's 'new economy' start-ups would have equal access and therefore equal chance of future success. Rather, Europe's high-tech firms are faced with a much more differentiated financial landscape. Their ability to provide for themselves continued flows of investment funds will vary on a case-by-case basis. Some will find that their future capitalisation is relatively secure, due to the favourable conditions of the wider financial network in which they are embedded, whilst others will be less

secure. This implies the likely existence of future pockets of knowledge-based growth within national economic structures, mediated by the controlling financial influence of banks, established firms and institutional investors – and not a broadly homogeneous European 'new economy'.

Irrespective of what happens in the later stages of the start-up cycle, the absence of a well developed venture capital market in Europe hampers the development of enterprise in old or new economy. The high volume of American 'new economy' start-ups has been made possible to a great extent because of the investment they have received from a well-developed venture capital market. In general, Europe lacks such a market in and, as such, also lacks a crucial source of impetus for 'new economy' start-ups and for the promotion of entrepreneurship anywhere in the economy. It is interesting to note that European venture capital firms have directed most of their investments into existing companies, mainly through financing merger and acquisitions activity, rather than into new start-ups (Weber and Posner 2000: 540).

The US made significant progress with its 'new economy' in large part because it had a financial system which was amenable to the related needs of entrepreneurs and the venture capital industry (Krueger and Pischke 1997). In their early years, start-ups require constant capital inputs in a context where there is no guarantee that returns will accrue to those investments, as start-ups are much more likely to fail than established firms. The development of appropriate support arrangements partly reflects the dominant social structure of accumulation, because entrepreneurship is a social process which is differently constituted in different countries (Freeman and Soete 1997). Entrepreneurial failure carries less social stigma in America than it does in Europe (see the contribution of Armstrong to this issue). Venture capitalists are consequently more inclined to engage with prospective start-ups, on the basis that with fewer social disincentives to take entrepreneurial risks, American entrepreneurs are more likely to target the most viable long-term business strategy, even if this entails the greatest short-term risk of failure.

The underlying structure of Europe's financial system also constrains the development of a deeper European venture capital market. Europe's second-tier equity markets are much less advanced than those in America (Steil et al 1996) and their combined business is only a fraction of that on NASDAQ. This has ensured that European venture capitalists in general have lacked a viable 'exit mechanism' for selling on successful start-ups once their initial capitalisation is complete. Contrast this with the situation in America, where US venture

capital firms found an ideal outlet for 'exiting' their investments in 'new economy' start-ups during the recent economic expansion (Weber and Posner 2000). The bullishness of the equity market in the second half of the 1990s was at least partially driven by a string of highly profitable initial public offerings of successful 'new economy' start-ups on NASDAQ.

The identification of a venture capital 'problem' within the EU has recently led the European Commission, working in collaboration with the European Venture Capital Association, into attempted corrective action. Driven by perceptions of the need to create a pan-European market that specialised in the continued capitalisation of 'new economy' start-ups, it was instrumental in the 1996 establishment of EASDAQ, a high-tech market modelled on the American NASDAQ. However, EASDAQ has typically been regarded as a threat by existing domestic exchanges, whose managers have responded by introducing their own high-tech markets to prevent 'national' business from migrating to a pan-European market. In consequence, the venture capital market for financing 'new economy' start-ups remains both underdeveloped and fundamentally national in character.

The argument so far shows that the development of an internal market for financial services within the EU is impeded along a number of different dimensions. The European economy currently experiences more limited financial integration (both across countries and across sectors) than the existence of single capital market legislation might suggest. The question must be whether the institutional specificities of the European financial system are such that 'Europe' is the wrong financial space through which to try to embed the 'new economy'. The existing European non-system is incompatible with the successful introduction of the 'new economy' insofar as that depends on providing venture capital for prospective start-ups and equity capital for successful start-ups.

Conclusion

The Presidential Conclusions to the Special European Council held at Lisbon in May 2000 will surely come to be seen as a product of their times. Insofar as Lisbon made any attempt to ask how knowledge-based growth is to be embedded within the existing structures of the European economy, the Presidential Conclusions

sidestepped possible answers. Much of its discussion of the exigencies of knowledge-based growth mirrored a popular discourse on the 'new economy', the spread of which *The Economist* attributes to a small group of "ultra-optimists" whose arguments are strong on rhetoric but weak on analytical detail (*The Economist*, 23.09.00: 4).

At no stage did the European Council ask perhaps *the* most fundamental question in this whole debate: is the 'new economy' a distinctive and uniquely American phenomenon? If it is too early to give a definitive answer to this question, this article encourages a sceptical answer by focusing on the institutional specificities of US-style knowledge-based growth and on the very different structure of the EU's labour and capital markets.

It is impossible to discuss the success of America's 'new economy' without also discussing the changing labour market conditions that have contributed so clearly to felicitous 'new economy' outcomes. In the absence of US-style labour market institutions of that nature, it is unclear whether Europe can simply import the 'new economy' from America. Politically, at the height of the stock bubble, many Europeans would have questioned whether labour market reform was a price worth paying for the 'new economy'; and, post-tech stock crash, more Europeans would surely now take that position. Any discussion of the 'new economy' must also recognise the institutional specificities of the American capital market, which has done so much to provide the financial backing for US high-tech growth. The US has an extremely well developed venture capital market in a way that the EU does not, and US capital markets would appear to offer more opportunities for the continued capitalisation of successful start-ups than those in the EU. Moreover, European equity markets continue to run along distinctively national lines, with national 'blue-chip' markets that dominate the overall market structure.

The EU simply does not have the segmented labour markets and the integrated capital markets which would allow it to be the relevant space for embedding the 'new economy'. Investment funds for high-tech firms in Europe are more likely to be channelled through banks and existing firms than they are for their American counterparts, who are more able to rely on capital markets for autonomous sources of funding. In the European case, the common binary distinction between the 'old' and 'new' economies is inappropriate at present, and may be so for some time to come.

Notes

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- ⁱ This may be changing to a certain extent given the recent cyclical downturn in the US economy. Whether this proves to be a rather more long-term trend is as yet unclear.
- The emphasis of the debate differs depending on whether it is primarily an academic or a practitioner debate. In general, academics have dominated the debates on 'globalisation' and, to a lesser extent, the 'European Social Model', whilst practitioners have been more prominent in the debate about the 'new economy'.
- The link between technology and growth is classically Schumpeterian in origin (see Schumpeter 1934). For a discussion of the need for a 'socialised' Schumpeterian analysis of technology within the growth process, see Porter 1990; Lazonick 1991.
- ^{iv} Whilst the nature of the welfare state regime and the extent of de-commodification institutionalised therein have differed across countries, the *principle* of de-commodification has been a generic feature of all post-war European welfare states.
- ^v This trend is more marked in countries like Britain, which already had capital market-based financial systems. For the distinction between bank-based and capital market-based financial systems, see Pollin 1995.
- vi Weber and Posner (2000: 529) suggest that Britain may be a "partial exception" to this rule, but even Britain's venture capital market comes nowhere near matching that of the US in terms of either its vitality or its liquidity.