Journal of Institutional Economics (2016), 12: 1, 79–103
© Millennium Economics Ltd 2015 doi:10.1017/S1744137415000211
First published online 22 June 2015

Institutional complementarities in the dynamic comparative analysis of capitalism

BRUNO AMABLE*

Paris School of Economics- Université Paris I Panthéon – Sorbonne and Institut universitaire de France, France

Abstract. The concept of institutional complementarity plays an important role in the comparative analysis of capitalism. It has often been criticised for being too static and too functionalist, unable to explain change because it would propose a view of institutional forms fitting perfectly with one another. After having presented the concept and its interest for comparative capitalism, this article argues in favour of its usefulness to explain institutional change. However, in order to be integrated fruitfully into a theory of institutional change, it is necessary to have a political economy definition of complementarity, which should not take institutions as some sort of inputs in a production function, but as socio-political compromises established in historically-specific conditions.

1. Introduction

The concept of institutional complementarity has been widely used in the historical and comparative institutional analyses of capitalism (Amable, 2000, 2003; Aoki, 1994, 2013; Boyer, 2004; Deeg and Jackson, 2007; Hall and Soskice, 2001; Höpner, 2005),[1] in order to express the idea that certain institutional forms, *when jointly present*, reinforce each other and contribute to improving the functioning, coherence or stability of specific institutional configurations, varieties or models of capitalism. Taking into account complementarities is important for several reasons. The notion is associated with the idea that there exist several feasible combinations of complementary institutions; this runs against the idea of the existence of a 'one best way' for institutional configurations, which would consist of a collection of 'best practices' in different institutional areas. But institutional complementarities also exclude that *any* combination of institutions would be possible in a given economy or observable at a given time.

Institutional complementarity is also an important concept for institutional change. At first sight, the concept seems ill-fitted to analyse change. Since

*Email: bruno.amable@univ-paris1.fr

1 Gagliardi (2014) provides a bibliometric analysis of the use of the concept of institutional complementarity.

institutional complementarity usually explains the existence and stability of certain institutional configurations, it should make them more resistant to change.[2] In this perspective, the only change that could be envisaged would be system-reinforcing. For these reasons, the concept of institutional complementarity has been criticised for being too 'static', that is to say unable to account for actual institutional change, and too functionalist, conceiving institutions as fulfilling the role of improving the overall (economic) systemic performance (Peck and Theodore, 2007). An economic functionalist view of institutional complementarity coupled with a rational theory of agents' behaviour and decisions could not explain why exiting institutional configurations would be modified: why change something that works well?

But complementarity can work both ways, reinforcing or weakening an existing institutional configuration (Amable, 2000). The former influence is emphasised in most of the literature, but the latter is also a possibility worth taking into consideration for the analysis of institutional change. Once an institutional form starts to change *in a certain direction*, it may weaken the existing 'positive', self-reinforcing complementarities with other particular institutional forms. Beyond a certain degree of change, previously stabilising complementarities will become destabilising according to the same cumulative mechanisms that previously ensured the stability of the institutional structure. A 'local' change, affecting a limited set of institutional forms, may exert an influence in other institutional areas which, in turn, will affect other institutions through the complementarity links. A chain reaction of institutional changes may therefore lead to a substantial alteration or even the break-down of a certain social system. Therefore, the concept of institutional complementarity is not doomed to support static theories of institutional diversity but can also be mobilised to explain the weakening and disappearance of some institutional forms.

However, one may wonder why some institutions would start to change in a direction that would ultimately affect the stability of the whole institutional configuration, which brings us back to the question raised previously: why change parts of a system where all parts already fit perfectly together? In the theory of varieties of capitalism for instance (Hall and Soskice, 2001), the stability of the differentiated varieties stems from their economic competitiveness, which can be achieved via the combination of two sets of institutions, respectively coordinated for the coordinated market economies, and less (or not) coordinated for the liberal market economies.[3] These mechanisms explain the absence of

2 '[I]*nstitutional complementarities have [. . .] important consequences [. . .] there is a tendency for institutions to reinforce each other, forming an interlocking ensemble [. . .] that is resistant to change*' Howell (2003) p.106.

3 The choice of the term 'coordination' to characterise one variety is unfortunate since there is coordination in liberal market economies too, through different channels than in so-called 'coordinated' economies.

convergence towards a unique, presumably liberal, variety that the mainstream economics view often holds for unavoidable. In this framework, an intensification of the competitive pressure, as a result of increasing globalisation of economic relations for instance, would lead to strengthening the respective characteristics of coordinated and liberal economies. In order to become more competitive, each variety would have to become even more in conformity with its nature. Taking into account economic rationality, this process of 'bifurcated convergence' (Soskice, 1999) would be, at least partly, understood by agents, who would therefore have no interest in demanding a radical institutional change, but on the contrary would press for an intensification of the specific nature of a given variety.

However, the evolution of non-liberal models of capitalism over the past decades does not plead in favour of bifurcated convergence. The spread of deregulation, privatisation or individualisation of the employment relation has significantly altered varieties of capitalism that relied on regulation, state intervention or collective bargaining (Jackson and Deeg, 2012). Yet, one has not observed a generalised convergence towards a market-based model either. The concept of 'hybridisation' (Callaghan, 2010), frequently used to explain how some organisational or institutional arrangements are imported and adapted rather than simply grafted onto an existing institutional configuration, provides a way to account for observed changes but tells very little regarding the reasons behind actual changes.

This article argues that a theory of institutional complementarity without economic functionalism and rooted in a political economy of institution and change is well equipped to analyse the ongoing change in contemporary capitalism. Next section sums up the importance of the concept of institutional complementarity in the historical and comparative analyses of capitalism. The following section addresses the challenges that the issue of change represents for a theory of institutional complementarity. The third section argues that a political economy of institutions can overcome the limitations of the economic functionalist explanations and contribute to a theory of institutional complementarity and change.

2. Institutional complementarity in comparative capitalism

The concept of institutional complementarity was formulated by Aoki (1994), following an idea found in Milgrom and Roberts (1992) about organisational complementarity within a firm. Defining institutions as equilibrium strategies in a game and using the supermodularity technique developed by Topkis (1998), one can analyse how the equilibrium strategies of agents in one area is complementary or conditional on the strategies of other agents in the same or another area. A game may therefore have several solutions, reflecting different combinations of institutions, whose robustness would be enhanced by complementarity between agents' optimal strategies.

The most commonly found notion of institutional complementarity is that the functional performance of one institution is affected by the presence/functioning of another institution. Reinforcing the influence of another institution or making up for its deficiencies are the expression of the same idea that two or several institutions jointly contribute to a given outcome. There is therefore a necessary reference to the *functions* that institutions assume within the economic system. But taking into account these functions does not imply to adopt the functionalist view according to which institutions appear endure and disappear in direct relation with these functions.

Although institutional complementarity was not mentioned as such in the theory of *régulation* until the late 1990s (Boyer, 2005), the idea was present in some form in the early works.[4] The analysis of the historical evolution of capitalism in the theory of *régulation* is based on the interaction between two basic social relations, the forms of market competition and the capital–labour relation (Boyer, 2007), defining a fundamentally unbalanced process of accumulation. More generally, the viability of an accumulation regime depends on the compatibility between five institutional forms: competition, the wage-labour nexus, the monetary and financial regimes, the state and the type of integration of the national economy into the world system. A '*surprisingly efficient*' (Boyer, 2007) institutional configuration prevailed during the Fordist post World War II period (until the early 1970s) wherein a social compromise between capital and labour was possible. Wage earners accepted the Taylorist work organisation in exchange for real wage increases according to productivity gains. The regularity of accumulation was enabled by a highly regulated financial system, competition was restrained and the Bretton Woods system stabilised international relations, allowing state intervention through countercyclical monetary and fiscal policies following Keynesian lines.

The 'efficiency' of these complementary institutional forms was manifested by the full employment, high profits, and cumulative improvements in living standards that the Fordist capital–labour compromise enabled. However, the 'surprising' element must not be missed. As emphasised in many later comparative capitalism analyses too (e.g. Martin and Swank, 2012; Streeck and Yamamura, 2001), there was no system builder implementing a grand scheme. The complementarities were found ex post.

4 For instance in Boyer, 1981, p.15, our translation: *'[T]he wage-labour nexus [. . .] is only one of the social forms characterising a capitalist economy [. . .]. As a consequence, [its] future configuration will not depend on its own logic only but also on the relations that this logic entertains with the transformations affecting respectively the concentration and centralisation of capital, the role of the state or the international division of labour'.*

Institutional complementarity plays a central role in the comparative analyses of contemporary capitalism. Aoki (1994, 2001) proposed a theoretical model of the Japanese economy based on the complementarity between two specific institutional forms, the Main Bank and the Japanese firm (J-firm). The latter is characterised by team production: the output of the firm is the result of the efforts of each member of a team in an uncertain environment. The firm relies on outside investors to finance the capital necessary to production. These investors cannot observe the actual output of the firm. Team members must exert a certain effort to produce output and receive a wage in return. The aim of the firm's management is to promote reciprocal effort behaviour between workers, but this can only be achieved imperfectly because monitoring is imperfect. In such a situation, it is possible to devise a contingent governance structure where the transfer of decision making regarding distribution of output residual, i.e. once contractual payments have been made (to outside investors), and the continuation of the team are contingent upon the realisation of final output. If the latter drops below a certain level, an outsider to the team, acting as an ex-post monitor, becomes the residual claimant and the team is dissolved. This ex-post monitoring scheme provides incentives for individual workers to provide the necessary level of effort. This particular ex-post governance mechanism is complementary to the organisation of production in teams. In other words, the financial system of Japan is an institutional form complementary to the Japanese pattern of work organisation. By contrast, the American system associates high-powered financial incentives with the relative absence of team work in favour of the individualisation of performance and reward.

Complementarities are also present in the theories of varieties of capitalism (Hall and Soskice, 2001), explaining the reinforcing mechanisms that lead to the emergence of two differentiated production systems, one based on the accumulation of specific skills and patient investment, the other relying on general skills and fast adaptation to changing market conditions. In the former type, incentives that reinforce investment in specific skills (stable employment, job security, social protection . . .) and institutions that enable long term industrial strategies (coordination among firms, bank-based financial system . . .) are complementary to one another because each institutional form reinforces the efficiency of the other for a competitive outcome.

Other types of complementarity are present in the analysis of the diversity of capitalism (Amable, 2003) among OECD countries. In the neoliberal model of capitalism, product-market competition makes firms more sensitive to adverse demand or supply shocks. When price adjustments cannot fully absorb shocks, quantity adjustments matter, particularly concerning the labour force. Therefore, product market competition leads to a demand for flexibility of employment. Competitive market pressure also makes firms adapt their business strategies. This is made possible by quickly reacting financial markets, which favour a fast restructuring, itself facilitated by flexible labour markets. This economic model favours fast adjustment and structural change and therefore entails a high degree of risk for specific investments. Competition extends to the education system. A non-homogenised secondary education system makes competition among universities for attracting the best students and among students for entering the best universities more crucial.

In the social democratic model, a strong external competitive pressure implies some flexibility for the productive system, which is not only achieved through layoffs and market adjustments.[5] Retraining of a highly-skilled workforce plays a crucial role in the adaptability of workers. Protection of specific investments of employees is realised through a mix of legal employment protection, a high level of social protection, and an 'active' labour market policy. A coordinated wage bargaining system enables a solidaristic wage setting which favours innovation and productivity. A centralised financial system enables firms to develop long-term strategies. The Continental European model possesses some features in common with the social democratic model. Wage bargaining is coordinated and a solidaristic wage policy is developed, but not to the same extent as in the social democratic model.

The South European model of capitalism is based on more employment protection and less social protection than the Continental European model. Employment protection is made possible by a relatively low level of product market competition and the absence of short-term profit constraints due to the centralisation of the financial system. However, a workforce with limited skills and education level does not allow for the implementation of a high wages and high skills industrial strategy.

The Asian[6] model of capitalism hinges upon the business strategies of the large corporations in collaboration with the state and a centralised financial system, which enables the development of long term strategies. Workers 'specific investments are protected by a *de facto* rather than *de jure* protection of employment, and by possibilities of retraining within the corporation. Lack of social protection and sophisticated financial markets make risk diversification difficult and render the stability provided by the large corporation crucial to the social and political acceptability of the model.

3. Institutional complementarity and institutional change

The above characterisations of institutional complementarity could lead one to believe that they describe a perfect fit of institutions with one another, leaving no room for change except in a system-reinforcing direction.[7] Of course, the

5 Except for the reallocation of the workforce from less to more productive firms.

6 Only OECD countries (Japan and Korea) are concerned by this denomination, not the whole Asian continent.

7 See also Pagano (2011).

above-exposed models of institutional complementarity are ideal-types and not accurate descriptions of real economies. Their aim is to emphasise a certain number of key characteristics used in the analytical representation of actual economies, not to reproduce with the utmost fidelity all the possible details of existing configurations. Using ideal-types in order to analyse the diversity of capitalism should not lead to the conclusion that actual economies never change or that existing types have always been there. In the 1970s, economies close to the neoliberal model such as the Anglo-Saxon countries possessed institutions inherited from the New Deal period or the compromises established after the Second World War that made them resemble the Continental European model from a certain perspective. Capitalism was mostly managerial, the role of finance and shareholders was limited, capital–labour relations were to a certain extent corporatist and the role of trade unions was far from negligible. These countries have experienced a rapid evolution towards the neoliberal model after the 1980s and the conservative revolution.

This also explains why one should not mistake the historical origins of existing models of capitalism with the analytical representation of their institutional complementarities. The historical building of the differentiated models of capitalism does not necessarily reflect the logic of complementary institutions that supports their existence. The coherence and fit of institutions with one another has very rarely, if ever, been the result of a grand design. Most complementarities have appeared ex post, between institutional forms which appeared at different periods, created for reasons other than a good fit with other complementary institutions. For instance, the complementarity found in the Japanese model of capitalism between an 'imperfect' labour market – imperfect according to the mainstream economics view, that is – and a centralised financial system did not result from a simultaneous creation of these institutional forms (Streeck and Yamamura, 2001). Internal labour markets of the Japanese corporation appeared in the early 20th Century when employers tried to reduce excessive turnover. The main bank system was implemented after WWII in order to support national economic developmentalism. The complementarity between these two forms is more a result of chance than anything else.[8] Also, Martin and Swank (2012) show how macro-corporatism in countries such as Denmark and Germany has its origins in the will of business to build strong multisector associations to oppose the threat that democracy represented for their interests and promote their own agenda. This is ironic since this high level of coordination

8 '*Within the large corporation, the rights of property owners and employees are interdependent but indirectly mediated by their respective relation to management. Their coevolution was shaped by a particular historical sequence of 'latecomer conservatism' [. . .] that presented inherent tensions present in the prewar corporate governance models [. . .]. The economic complementarities or coherence of nonliberal corporate governance were not inevitable and resulted from an unintended fit. Nonliberal models came to 'hang together' as institutions were adapted in a piecemeal fashion and took on new functions within a new institutional environment.*' (Jackson, 2001: p. 126).

was instrumental in the establishment of a more egalitarian capitalism in the 20th Century. This should not be understood as the irrelevance of the concept of institutional complementarity when it comes to analysing institutional change. The relation between institutionally complementary institutions and change may be envisaged according to two radically different perspectives. A first view would be to consider that institutional complementarity renders change impossible or limited to one that would increase the whole fit of institutions, in the spirit of the bifurcated convergence that increases differences between liberal and coordinated market economies in the VoC approach of Hall and Soskice (2001). The evolution of institutions is taken to follow the imperative of increasing competitiveness of the economy. Competitiveness is taken to grow with coordination in coordinated market economies, and with liberalisation in liberal market economies. Therefore, an *exogenous* change in the environment, such as a more intense competitive pressure following 'globalisation', will reinforce the distinctive characteristics of the two varieties of capitalism: towards more coordination or towards a more pronounced market orientation.[9] A change in the 'wrong' direction, decreasing coordination in coordinated economies or increasing market regulation in liberal market economies, would lead to inferior economic performance and would therefore be opposed by the central agents of Hall and Soskice's theory, the firms.

This simple prediction has been contradicted by the evolutions observed in the archetypal coordinated economy: Germany. As shown in Kindermann (2005) and Streeck (2011), the key institutions of the German model have experienced change in a decidedly non-coordinating direction for the past two or three decades: industry-wide collective bargaining declined and the bargaining system turned significantly more fragmented and 'pluralist'; the role and membership of intermediary organisations, key actors in the coordinated economies, declined and their internal dynamics had to accommodate rising tensions; the social model evolved in a more market-oriented and less solidaristic direction; the bank-industry relationship dissolved and *Deutschland AG* was disorganised through a series of legislative reforms of the capital market; German employers launched initiatives to dismantle the system of industrial relations supposedly at the root of their competitiveness... A remarkable aspect of these evolutions is that in spite of '*numerous causal connections across sectoral boundaries, none of them resembled the sort of counterbalancing negative feedback that one would expect in a self-stabilising system defending its equilibrium against external or internal shocks*' (Streeck, 2011: p. 97). The existence of interrelations between

9 '*We see national political economies as systems which often experience external shocks [...]. These shocks will often unsettle the equilibria on which economic actors have been coordinating [...]. We expect firms [...] to modify their practices so as to sustain their competitive advantage [...]. Thus, much of the adjustment process will be oriented to the institutional recreation of comparative advantage*' (Hall and Soskice, 2001, eds., pp. 62–63).

institutional forms did not prevent the German economic system from becoming more disorganised and less 'coordinated'.

But it is in fact a characteristic of systemic interdependences that they can work both ways. If a change in institutions in one direction can reinforce the systemic coherence through complementarities, a change in the opposite direction can lead through the same channels to a general disorganisation of the system and a mutually dysfunctional collection of institutions where positive externalities turn into negative ones.

A second view on the relation between institutional complementarity and change is therefore that complementarities make a system particularly fragile. But this view raises the question of the origins of the negative change in institutions. The story told would correspond to the exact opposite of the previous one. Instead of evolving towards more coherence and stability, the system would unwind and dissolve, even as a consequence of apparently modest change in a remote part of the institutional configuration. Institutional complementarity would thus render a model particularly fragile, all the more so that the complementary mechanisms are powerful and that the fit between institutions is tight.

Evolutions towards a market-based model of capitalism have been observed in non-liberal economies: France and Italy (Amable and Palombarini, 2014; Amable *et al.*, 2012a, 2012b), Germany (Streeck, 2011), Japan (Lechevalier, 2014; Magara and Sacchi, 2013), Sweden (Schnyder, 2012) . . . The financialisation of the economy, financial market development, reforms in corporate governance, the rise of shareholder power, the decline of collective bargaining, privatisations, welfare state retrenchment etc. are phenomena that have, to various extents, affected non-liberal capitalism. The decrease in the involvement of banks in the direct financing of industrial firms particularly affected Asian, continental European and social-democratic models. Sweden has rapidly liberalised its financial system in the 1980s and continued in this direction despite a major banking crisis in 1991; France has done the same in the 1980s (Amable *et al.*, 2012a). Germany followed in the 1990s and German banks, like their foreign competitors, preferred to concentrate their efforts on market activities rather than directly finance industry. This has also affected Japan, which had a system where banks, while not present in the capital of industrial companies, exercised a dual role of financing and control and ensured the presence of a stable shareholding. This stable ownership fell sharply: it averaged 43% of the capital of industrial firms in 1991, but only 26% in 2002. Also, as in European countries such as France, financial liberalisation has led to a greater presence foreign investors, which held 25.5% of the publicly traded in 2007 against 4.2% in 1990 assets (Isogai, 2012).

Corporate governance has undergone significant changes as a direct result of the increased priority given to shareholders over employees in determining the objectives of the firm, focusing on financial returns rather than maintaining employment, increased management control and alignment of incentives on the financial performance of the firm. These elements are a manifestation of the progressive failure of the compromise characteristic management of managerial capitalism that was widespread during the Fordist era: the transition from a more or less informal compromise between management and employees in favour of an alliance between management and shareholders.

The institutions governing the employment relationship have also been significantly affected in all non-liberal models. Employment protection legislation (EPL) for regular employment contracts has decreased significantly in countries such as Portugal, Spain and Greece,[10] but also in Korea and Finland. For some countries, more than a generalised labour market flexibility, it is a partial liberalisation affecting the margins rather than the core of the workforce that has been observed. The level of EPL for temporary contracts has dropped tremendously in South European countries such as Spain, Italy, Portugal and Greece, but also in typically 'coordinated' economies such as Sweden, Denmark and Belgium. In Germany in 2013, the proportion of atypical employment (fixed-term contract, part-time, temporary employment, mini and midi jobs . . .) in total wage employment was 24% (35% for women).[11] The proportion of low wage earners was slightly under 25%, to be compared with 10% in Denmark.[12]

Asian capitalism was characterised by the importance of the wage relation defined at the level of the corporation (Yamada, 2000). The job security (lifetime employment) concerned not all employees but the central part of the workforce. This practice has declined since the late 1990s; as in many other countries, the proportion of regular contracts decreased and the number of precarious employees increased. Atypical contracts accounted for 20% of Japanese employees in the first half of the 1990s and one third of all labour contracts in 2005 (Yamada and Hirano, 2012). Furthermore, the non-regularisation of employees is becoming a hallmark of Japanese wage relation (Yamada and Hirano, 2012). The rise in precarious and non-regular employment is also observable in Korea (Ok and Yang, 2012). Similarly, the decentralisation of wage bargaining, that is to say, their evolution towards a level closer to the firm, has affected all countries where centralised (national) or coordinated negotiations were important : Sweden (Schnyder, 2012), Japan (Isogai, 2012) or even France and Italy (Amable *et al*., 2012a, 2012b). Between 2008 and 2013, the number of sectoral agreements has dropped from 202 to 14 in Greece, from 1,448 to 543 in Spain[13] and from 200 to 46 (2012) in Portugal (Müller and Schulten, 2014). Centralised negotiations have increasingly tended to turn

10 See Appendix figures for the evolution of employment protection legislation.

11 Data from Statistisches Bundesamt.

12 Figures for 2010 taken from Rhein (2013). See also Thelen (2014) for a comparison of liberalisation trajectories in Germany, Denmark and the Netherlands.

13 The number of workers covered by collective agreements in that country has dropped from 12 to 5.7 million during the same period.

into ways to accept ‘wage moderation’ – in some cases, wage cuts – or labour flexibility, rather than representing a way to distribute productivity gains to stabilise the capital–labour compromise as during the Fordist period (Boyer, 2004). Institutional changes in a particular area had consequences in other areas through complementarities between institutions. Privatisations lead not only to a change regarding the legal status of the companies that are privatised, but often also to a change in the type of employment relation for the people who work for them (Schulten *et al.*, 2008). Privatisations have contributed to weaken macro-corporatism and thus supported the diffusion of micro-corporatism, more in line with a neo-liberal model of capitalism. The status of employees has evolved towards private contracts and self employment and segmentation of the labour force has increased, with the emergence of a two-tier workforce divided between core and peripheral workers.

Similarly, the financialisation of economies, strengthening the pressure to achieve high short-term profitability, has made it more difficult to guarantee a certain degree of job security for employees. The extension of financial markets has also led to the provision of private services (insurance . . .) competing with public welfare systems. It is impossible to review in detail all the knock-on effects of institutional change in one area for another institutional area, but Table 1 gives an overview of the destabilising effects of neoliberal structural reforms for non-liberal models of capitalism.

However, neoliberal structural reforms have been implemented for at least three decades (financial liberalisation and privatisations started in the 1980s), and yet diversity of capitalism persists, even if less pronounced than it has been. The demise of non-liberal models through negative complementarities therefore seems to be rather slow. A possible explanation is that the tight fit of institutions posited in the theoretical models never existed in reality. There is much more slack in actual models of capitalism than what theories can account for (Streeck, 2005). The models of institutional complementarity presented in the literature are ideal-types that simplify a certain number of key features by necessity. This may explain why, in reality, some degree of change is possible without endangering the system of existing ‘positive’, system-reinforcing, complementarities. A change, even in the ‘wrong’ direction may not imply a brutal break-up but rather limited adjustments.

But if slack represents some ‘imperfection’ which explains the loose character of the model, it cannot be a general explanation of the persistence of some institutional forms while others change significantly. This phenomenon, dubbed ‘hybridisation’, has been identified for productive models (Boyer, 1998). The idea is that importing foreign part into a given (productive) system leads to an adjustment of the imported parts and the importing system to one another. In this perspective, hybridisation is not a loss of systemic coherence, but the creation of new complementarities. Applying this idea to macro institutions is not as easy as it seems. Hybridisation is itself a loose concept when the reasons for successful

Table 1. Structural reforms and institutional complementarity

Structural reforms\ consequences for institutions	Employment relation	Product market competition	Social protection	Financial system	Education system	Fiscal policy
Labour market liberalisation	More individualistic; less investment in co-specific assets (skills etc.) Increased demand for 'marketable' skills; increased precariousness and downward wage pressure at the lower end of the skill distribution;	Less quality-based production as a result of less investment in co-specific assets; More possibilities for price-based competition due to the relatively lower wages at the lower end of the skill distribution	Increased demand for protection against employment risk (substitution for diminished employment protection) where possible. Less solidarity in bargaining (individualisation of the employment relationship) implies more financially fragile and less socio-politically accepted social protection systems. Diffusion of precarious or atypical employment jeopardise the financing of social contributions-based systems.	Increased demand for private insurance (substituting for decreased Employment protection) favours the expansion of the financial sector	Increased demand for 'marketable' skills favours the reorientation of education systems towards the satisfaction of labour market (firms) requirements; Increased leverage for firms regarding the definition of curricula	Increased individualisation and less solidaristic bargaining make redistributive policies less socio-politically stable

Table 1. Continued.

Structural reforms\ consequences for institutions	Employment relation	Product market competition	Social protection	Financial system	Education system	Fiscal policy
Product market liberalisation	Increased competition make firms more reluctant to grant employment stability to wage earners; Increased demands for labour market deregulation from firms	Increased competitive pressure on firms; privatisations favour the position of private oligopolies	Increased competition increases firms' demands for lower social contributions, which threatens the financing of social protection systems	Privatisations contribute to the development of financial markets		makes 'fiscal optimisation' practices easier and favours fiscal competition
Social protection retrenchment	Increased income risk linked to labour market fluctuation; leads to an increased demand for employment protection where this is possible	Less protection for specific assets of wage earners; influence on production specialisation; Decrease in social contributions		Increased demand for private insurance;	Increased demand for 'marketable' skills	Decreased public expenditure and taxation

Table 1. Continued.

Structural reforms\ consequences for institutions	Employment relation	Product market competition	Social protection	Financial system	Education system	Fiscal policy
Education system reforms (privatisation, increase in fees . . .)	Increased differentiation makes solidaristic wage setting more difficult; increase in inequality	Less emphasis on specific skills; makes some productions more difficult	Less support for universal systems because of increased differentiation of the work force	Increased private financing demand for student loans; Favours financialisation		Decreased public expenditure and taxation
Financial system deregulation	Increased importance of profit targets; labour increasingly bears the costs of flexibility and adjustment to the business cycle	Increased financialisation of industrial firms (profit targets, short termism etc.)	Increased competition from private insurance systems		Increased supply of students loans instrumental to privatisation of education systems	Alters the terms of public borrowing; increased importance of financial markets
Fiscal policy changes	Less redistribution makes income more dependent on labour market wages	Macroeconomic stabilisation policies more difficult, increased business cyclicality	Pressures on retrenchment	Favours financial sector's development	Public education's financing more difficult; favours increasing privatisation	

hybridisation – leading to a stable institutional structure – are not spelled out.

In order to overcome the limitations of this concept, it is necessary to abandon the focus on the *forms* that institutions take (centralised or decentralised, market oriented or coordinated, etc.) in order to assess their complementarity with one another, and turn to the *reasons* that will make them complementary to one another and lead to institutional stability or change. Following Peter Hall's advice to avoid '*crude forms of functionalism*' (Hall, 2005: p. 375), we now turn to a political economy of institutions to consider different complementarities.

4. A political economy view of complementarities

Political economy and institutions

By political economy, one must understand an approach that analyses the evolution of societies as the product of the interactions between the economic dynamics and the evolution of the political balance of power (Amable, 2003; Amable and Palombarini, 2005, 2009; Palombarini, 2001). A political economy view of institutions defines them as socio-political compromises. Social groups (and individuals that compose them) have differentiated interests because of their different positions in the social structure.[14] They therefore express differentiated political demands, which political actors may or may not satisfy with specific policies or design of institutions. The decision of political actors will depend on the political power of the different groups, and their capacity to provide political support. According to the logic of politics, which is the accumulation of power, public action is oriented towards the satisfaction of demands coming from the most politically powerful groups.

Social groups express heterogeneous demands, a consequence of social differentiation. It is therefore possible to satisfy diverse demands concerning different dimensions of the social system. However, some demands are partly or totally incompatible and political actors have to select the interests that will be preserved and those that will be neglected; the former will be the dominant interests and the latter the dominated ones. The policies that will be implemented will depend on the type of compromises that can be established between the dominant social groups. The set of such dominant groups is called the dominant social bloc. When such a bloc exists, following the policy strategy adopted by political actors, social conflict is under control. A break-up of the dominant bloc is a situation of crisis.

Economic dynamics influences the viability of the dominant bloc, but the latter cannot be reduced to indicators of the former. There is no *strict* determination between economic 'performance' and the stability of a given institutional structure, although poor macroeconomic performance may imply a growing level

14 Interests as agents perceive them; interests are socially constructed and not 'objectively' given.

of dissatisfaction with the *status quo* and lead to pressure for change.[15] Economic growth for instance may favour the establishment of social compromises and reinforce the viability of a given model of capitalism, defined by a combination of institutional structure, political strategy and dominant social bloc, by increasing the amount of resources available to political actors and economic agents alike. This should, *ceteris paribus*, reduce the contestation of social order and make the establishment of compromises easier. However, homothetic growth is seldom a feature of the real world. Distributional issues are central to the way social conflict can be neutralised and growth implies generally an alteration of the productive structure and other dynamics that are likely to change the balance of power between social groups, increasing income and opportunities for some, implying losses and higher risks for others. Therefore, growth may lead to a change in expectations and demands coming from groups whose political power is changing too. Growth may then make the dominant social compromise more fragile through different channels: the balance of power within the dominant bloc may change, some groups declining while others grow, leading to new demands impossible to satisfy within the limits of the current social compromise; some dominated groups may increase in importance, which would make their exclusion from the dominant bloc more difficult to sustain. Another aspect is that growth may alter the conditions under which strictly *national* compromises may be stable. Supranational influences may acquire more importance and destabilise compromises previously established within national constraints.[16]

The break-up of a dominant social bloc implies to relax the constraints defined by the existing institutional framework, political strategy and composition of the dominant bloc in order to extend the space for mediation.

Complementarity and hierarchy of institutions

This political economy definition of institutions and change has consequences for the definition of institutional complementarity. Two types of complementarity may be distinguished according to the identity of the agent that considers this complementarity. For a social group, two institutions are complementary when their joint presence reinforces the group or protect their interests. Firms' managers may find financial liberalisation and labour market deregulation complementary because they jointly contribute to increasing their profit margins: financial deregulation allows managers to obtain a larger share of value added, making the wage 'moderation' obtained thanks to diminished employment protection all the more profitable. Wage earners could on the other hand find that social protection and centralised bargaining are complementary in the

15 Poor macroeconomic performance may also be used as a tool by the proponents of institutional change, helping them to put across the message that 'this cannot go on like that' and 'something needs to be changed', what the structural reform literature calls 'creating a sense of emergency' (Boeri *et al*., 2006).

16 International agreements (European Union, WTO, TRIPs, etc.) imply constraints that can be contradictory to some of the national compromises and thus destabilise them.

protection of their interests. Centralised bargaining would promote trade-unions, whose influence in the management of social protection organisations would be increased, making this protection more generous for workers.

For political actors, complementarity must be defined differently, in reference to the support they can obtain from a sufficiently large set of social groups. It must therefore be defined in reference to the formation of a dominant social bloc. Complementary institutions are those which jointly contribute to creating or stabilising a dominant social bloc through the widening of the space for political mediation.

In both cases, complementarity is defined with a reference to a function, but the function differs according to the agents considered. Social groups' objective is the promotion of their interests; political actors are interested in obtaining political support. The two types of complementarities do not necessarily correspond to the same institutional forms. If for business, labour market deregulation and financial system liberalisation may be complementary institutions as far as they jointly contribute to increasing profit margins, they may not be so for the political leadership. If this leadership looks for a dominant social bloc including at least some fractions of the wage-earning population, associating labour market regulation or some degree of social protection to financial system deregulation may be complementary in the pursuit of a dominant social bloc, looking for a compromise that different groups could consider as acceptable.

Complementarity is therefore not conceived as a 'technical' matter, as if one could simply look at the economic performance induced by the joint presence of two or more institutional forms according to the equivalent of a production function. A socio-political complementarity is defined in reference to stability of the dominant bloc, and it depends on the compatibility between the expectations and demands of the social groups that compose the bloc. It is therefore historically specific.

In order to analyse the complementarity between institutional forms in the context of a given dominant social bloc, another concept, that of hierarchy of institutions, is useful.

Hierarchy is defined in reference to a social group or to the stability of dominant bloc. For a group, hierarchically superior institutions are those that matter most for their interests. For the political leadership, hierarchy is defined according to the importance that institutional forms possess regarding the stability of the dominant socio-political compromise. Hierarchically superior institutions are those whose alteration would imply challenges to the existence of the dominant social bloc.[17]

17 If institutions are defined as socio-political compromises (Amable, 2003; Amable and Palombarini, 2005, 2009), changing an institution implies reopening a social conflict, which implies some costs. Institutions may be more or less easy to implement as a function of the seriousness of the conflict. Some institutions may become 'sticky', i.e. difficult to change, even when powerful interests wish them

 https://doi.org/10.1017/S1744137415000211

For instance, the institutions of the wage-labour nexus have played a central role in the socio-political compromises of modern capitalist economies since the end of World War II (Boyer and Mistral, 1983; Delorme and André, 1983). In the Fordist period, they have made a specific form of social alliance between business management and labour possible (Boyer, 2013). These institutions are still the central elements of the dominant social compromise in most developed countries.

Hybridisation in France

One may then consider some of the institutional changes within non-liberal capitalism from this perspective. The economic dynamics in the 1970s and 1980s has rendered the socio-political compromises inherited from the post-war Fordist period more fragile. Economic and technological development led to a vanishing of the typical Taylorist production organisation, with consequences regarding the structure of the blue collar workers and the shrinking of the mass-production worker population. De-industrialisation has also affected the skilled segments of the blue collar population, and led to a weakening of the traditional industrial trade union base. Internationalisation of firms made them less dependent on the domestic capital–labour compromises and opened the possibility for them to participate actively to a competition between economic systems.

These evolutions created new opportunities for some social groups and led to new demands for further trade and capital liberalisation which reinforced the previously-mentioned trends, making tax evasion easier to implement. Financialisation increased the relative power of financiers and managers and decreased that of labour (Boyer, 2013), which reinforced the pressure for liberalisation and flexibilisation of the employment relationship. These changes meant a significant alteration of non-liberal capitalism, which affected first the institutional forms which were of relatively secondary importance for the preservation of the dominant bloc in countries close to the European models, such as France (Amable, 2003; Amable *et al.*, 2012b): the financial sector, product maket competitition, etc. The will to preserve the dominant bloc and thus political support has led political actors to preserve the institutions on top of the hierarchy of institutions: labour market institutions and social protection, until demands for 'structural reforms' in these areas became more pressing.

The case of France is a good example of the limits of this strategy. In the early 1980s, France had two social alliances with differentiated demands which competed for the role of a dominant bloc (Amable, 2014; Amable and Palombarini, 2014; Amable *et al.*, 2012a, 2012b): the Left bloc, which gathered a majority of the employees of the public sector and the bulk of the working

to change because minority interests are protected by other institutions (constitutional rights . . .) which themselves are socio-political compromises whose questioning would imply substantial social and political costs.

classes; the Right bloc gathered the mean and superior income classes of the private sector, self-employed professionals, self-employed workers (shopkeepers and craftsmen), as well as a majority of farmers. These two blocs started to break-up during the 1980s and 1980s around issues linked to labour market reforms and European integration. The wage-earning fraction of the Right bloc was reluctant to see the implementation of radical labour market deregulating reforms which the more affluent and self-employed parts of the bloc asked for.[18] On the Left, the working classes opposed European integration and the 'modernisation' of the French economy (i.e. adaptation to the single market) that it implied for employment protection, the welfare state and the possibility to implement Keynesian policies.

The Left and Right governments were therefore led to implement reform strategies that took into account the difficulties of their respective social bases. As shown by the consequences of liberalisation in Table 1, the employment relationship and the social protection system were bound to be affected by liberalisation implemented in the other institutional areas sooner or later.

On the Left, the 'modernisation' affected first the institutional areas that were not too sensitive for the socio-political basis of the left, i.e. not too high up in the institutional hierarchy of the left bloc (social protection and labour rights). Deep transformations affecting the financial and corporate governance system were thus traded against some extensions of employment protection, an increase in public employment and the 35-hours week, itself an ambiguous reform which decreased the duration of the legal working week while at the same time extending the flexibility of work organisation. The logic behind those reforms was the achievement of a transformation of the French model into a neoliberal/social hybrid model, whose stability is highly questionable if one considers the complementarity between institutions (Amable, 2003, 2009; Deeg and Jackson, 2007).

The Right dropped during the 1990s and 2000s the radical Thatcherite strategy it briefly adopted in the early 1980s because it antagonised part of its social base. The issue of labour market flexibilisation was particularly sensitive. The leading politicians on the Right acknowledged that the strong demand for a liberalisation and flexibilisation of the labour market of one part of the right electorate was difficult to reconcile with the demands for security expressed by private sector employees. This fundamental contradiction explains the cautiousness with which labour market reforms were undertaken until Sarkozy's presidency. The only significant attempts to flexibilise the labour market were always made at the margins, i.e. on targeted labour force groups.[19]

18 In 1978, only 28% of the individuals with a centre-right, right or far-right political leaning were opposed to the proposition to forbid firms from laying off employees until they had found alternative employment (1978 French electoral survey).

19 Such tempted adjustments at the margins are for instance Villepin's CPE (contrat première embauche) for under 25 year's workers and CNE (contrat nouvelle embauche) for very small firms:

Even Sarkozy, expected to be a radical neoliberal reformer,[20] promised that the labour market flexibilisation he wanted to implement would be based on 'flexicurity' (i.e. flexibility combined with income security) and not purely and simply flexibility. The Great Depression of 2008 and the rise of unemployment it provoked prevented the implementation of this strategy.

The strategy of the main 'left' party, the PS, changed with the Hollande presidency after 2012. The renewal of the social base of the left, expected since the 1980s by some fractions of the PS and theorised by a think tank close to the PS (Terra Nova, 2011), meant that the importance of groups more favourable to labour market flexibility (managers, high skilled private and public sector employees . . .) had grown while that of groups opposing flexibility (blue collars, clerks . . .) had diminished. The objective of the PS-led government became then to follow the footsteps of Schröder and implement more substantial labour market reforms in the spirit of the Hartz reforms of the early 2000s.

The various attempts to preserve socio-political support from groups expressing increasingly differentiated and sometimes contradictory demands explain the 'hybridisation' of non-liberal models of capitalism: the implementation of neoliberal reforms in some institutional areas has altered the models but not turned them into liberal varieties. The question is whether these 'hybrid' models represent a possible equilibrium in terms of institutional complementarities. The hybrid of neo-liberal and social democratic model that would come out of the attempts to flexibilise the labour market while preserving social protection may not represent a solution in this respect. This model of capitalism would include product and financial market deregulation, labour market flexibility, 'active' welfare state and investment in education and high technologies (Amable *et al.*, 2012a) in a context of fiscal austerity imposed by the necessities of European integration. Fiscal austerity (and tax competition) will imply cutbacks in public expenditure, and above all social expenditure, which is in contradiction with the welfare state expansion implied by the flexicurity strategy. The decline of centralised or coordinated bargaining in favour of the individualisation of labour relations, partly resulting from an increase in the competitive pressure in product markets, will mean the end of solidaristic wage setting and a growth of income and wealth inequalities. This will have for consequence an aggravation of divergences regarding the size and extent

both contracts were intended to allow firms to lay off workers during the first 2 years, after what the contract would have became a permanent contract. However, the CPE was never implemented given major street demonstrations, whereas the CNE was suppressed only a few months after being implemented. See Amable (2015).

20 Our analysis of the concessions made by Sarkozy in order to take into account the contradictions between expectations coming from his own social base differ from the rather normative analysis of Levy (2008), for whom *there is no alternative* to the neo-liberal transformation of the French model: '*sooner or later, French leaders, whether Sarkozy or an eventual successor, will bite the bullet and make the changes, however painful and unpopular, that are necessary to restore the country's economic vitality*' (p. 432).

of redistribution and social policies, making it more difficult to reach a socio-political equilibrium.

5. Conclusion

The concept of institutional complementarity is useful to understand how specific institutional forms interact in a given social system, giving it a certain internal coherence. As mentioned above, this notion is sometimes considered in a static way, as if institutions were perfectly fitting with one another in a given system. In such a perspective, change is either impossible, because there would be no reason to change something which is 'efficient', or has a radical effect: a modest change in one institution would make the whole system collapse by the unwinding of the previously 'positive' complementarities. But as underlined by Streeck (2005), a concept of institutional complementarity must leave space for institutional change which is neither minor nor a total breakdown of the system. Current comparative capitalism empirical analysis shows significant institutional change different from a complete redesign of institutions.

This article has argued that an analysis of such a process, considered by some authors as the 'hybridisation' of economic systems, is possible when, as already mentioned by Streeck (2005), one relinquishes the functionalist view that institutions must be complementary with one another with respect to economic performance or some measure of systemic efficiency that would be a shared of all agents in the system. Based on a political economy theory of institutions and taking into account the historically specific conditions defining the pattern of complementarity between different institutional forms and the hierarchy of institutions of the different social groups, the concept of institutional complementarity, understood in its political economy dimension, can help to analyse the decomposing or recomposing/hybridisation of institutional architectures. Contrary to most comparative capitalism analysis, this article has proposed a concept of institutional complementarity centred on the stability, or lack thereof, of the social blocs that support the existing institutional arrangements. The evolution of these blocs conditions institutional change.

Adopting such a perspective requires going beyond the consideration of the forms that institutional change may take, in order to analyse the reasons for this change. Considering the complementarity of institutions with respect to the political stability of a certain institutional architecture, this article has shown how a certain hybridisation of the French model of capitalism could be explained by the attempts of political leadership to either renew or stabilise the social base necessary to their own political stability, under the influence of external factors on which the political actors had only a partial influence. Hybridisation of models and institutional change in general are therefore far from being falsifications of the existence of institutional complementarities.

References

Amable, B. (2000), 'Institutional Complementarity and Diversity of Social Systems of Innovation and Production', *Review of International Political Economy*, 7(4): 645–687.

Amable, B. (2003), *The Diversity of Modern Capitalism*, Oxford and New York: Oxford University Press.

Amable, B. (2009), 'Structural reforms in Europe and the (in) coherence of institutions', *Oxford Review of Economic Policy*, **25**(1): 17–39.

Amable, B. (2014), 'The Unsolved Contradictions of the Modernists. Economic Policy Expectations and Political Crisis in France 1978–2012', *Document de Travail du Centre d'Economie de la Sorbonne* n°2014.23.

Amable, B. (2015), 'The Political Economy of the Neo-Liberal Transformation of French Industrial Relations', Forthcoming *ILR Review*.

Amable, B., E. Guillaud and S. Palombarini (2012a), 'Changing French Capitalism: Political and Systemic Crises in France', *Journal of European Public Policy*, **19**(8): 1168–1187.

Amable, B., E. Guillaud and S. Palombarini (2012b), *L'économie Politique du Néolibéralisme. Le cas de la France et de l'Italie*, Paris: Editions Rue d'Ulm.

Amable, B. and S. Palombarini (2005), *L'économie Politique n'est pas une Science Morale*, Paris: Raisons d'Agir.

Amable, B. and S. Palombarini (2009), 'A Neorealist Approach to Institutional Change and the Diversity of Capitalism', *Socio Economic Review*, 7(1): 123–143.

Amable, B. and S. Palombarini (2014), 'The Bloc Bourgeois in France and Italy', in H. Magara (ed.), *Economic Crises and Policy Regimes. The Dynamics of Policy Innovation and Paradigmatic Change*, Cheltenham: Edward Elgar, pp. 177–216.

Aoki, M. (1994), 'The Contingent Governance of Teams: Analysis of institutional Complementarity', *International Economic Review*, **35**(3): 657–676.

Aoki, M. (2001), *Toward a Comparative Institutional Analysis*, Cambridge: MIT Press.

Aoki, M. (2013), 'Historical Sources of Institutional Trajectories in Economic Development: China, Japan and Korea compared', *Socio Economic Review*, **11**(2): 233–263.

Boeri, T., M. Castanheira, R. Faini and V. Galasso (eds.) (2006), *Structural Reforms Without Prejudices*, Oxford: Oxford University Press.

Boyer, R. (1981), 'Les Transformations du Rapport Salarial Dans la Crise: Une Interprétation de ses Aspects Sociaux et économiques', *Document de Travail CEPREMAP* No. 8105.

Boyer, R. (1998), 'Hybridization and Models of Production: Geography, History, and Theory', in R. Boyer, E. Charron, U. Jurgens and S. Tolliday (eds.), *Between Imitation and Innovation The Transfer and Hybridization of Productive Models in the International Automobile Industry*, Oxford: Oxford University Press, pp. 23–56.

Boyer, R. (2004), '—New Growth Regimes, but Still Institutional Diversity', *Socio-Economic Review*, **2**(1): 1–32.

Boyer, R. (2005), 'Complementarity in Régulation theory', *Socio Economic Review*, **3**(4): 366–371.

Boyer, R. (2007), 'Capitalism Strikes Back: Why and what Consequences for Social Sciences?', *Revue de la Régulation*, **1**, http://regulation.revues.org/document1369.html (Accessed March 2015).

Boyer, R. (2013), 'The Present Crisis. A Trump for a Renewed Political Economy', *Review of Political Economy*, **25**(1): 1–38.

Boyer, R. and J. Mistral (1983), *Accumulation, Inflation, Crises*, Paris: PUF.

Callaghan, H. (2010), ‘Beyond Methodological Nationalism: How Multilevel Governance Affects the Clash of Capitalisms’, *Journal of European public Policy*, **17**(4): 564–580.

Deeg, R. and G. Jackson (2007), ‘Towards a More Dynamic Theory of Capitalist Variety’, *Socio-Economic Review*, **5**(1): 149–179.

Delorme, R. and C. André (1983), *L’Etat et l’économie*, Paris: Seuil.

Gagliardi, F. (2014), ‘A Bibliometric Analysis of the Literature on Institutional Complementarities’, *Paper presented at the Inaugural WINIR Conference*, Old Royal Naval College, Greenwich, London, UK, 11–14 September 2014.

Hall, P. (2005), Institutional complementarity: causes and effect, *Socio Economic Review*, **3**(2): 373–377.

Hall, P. A. and D. Soskice (2001), ‘–An Introduction to Varieties of Capitalism’, in P. A. Hall and D. Soskice (eds.), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford and New York: Oxford University Press, pp. 1–70.

Höpner, M. (2005), ‘What Connects Industrial Relations and Corporate Governance? Explaining Institutional Complementarity’, *Socio-Economic Review*, **3**(2): 331–358.

Howell, C. (2003), ‘Varieties of Capitalism: And Then There Was One?’, *Comparative Politics*, **36**(1): 103–124.

Isogai, A. (2012), ‘The Transformation of the Japanese Corporate System and the Hierarchical Nexus of Institutions’, in R. Boyer, H. Uemura and A. Isogai (eds.), *Dans Diversity and Transformations of Asian Capitalisms*, Abingdon and New York: Routledge, pp. 31–55.

Jackson, G. (2001), ‘The Origins of Nonliberal Corporate Governance in Germany and Japan’, in W. Streeck and K. Yamamura (eds.), *The Origins of Nonliberal Capitalism: Germany and Japan in Comparison*, Ithaca, NY: Cornell University Press, pp. 121–170.

Jackson, G. and R. Deeg (2012), ‘The Long-Term Trajectories of Institutional Change in European Capitalism’, *Journal of European Public Policy*, **19**(8): 1109–1125.

Lechevalier, S. (2014), *The Great Transformation of Japanese Capitalism*, Abingdon and New York: Routledge, Nissan Institute/Routledge Japanese Studies.

Levy, J. D. (2008), ‘From the Dirigiste State to the Social Anesthesia State: French Economic Policy in the Longue Durée’, *Modern and Contemporary France*, **16**(4): 417–435.

Magara, H. and S. Sacchi (eds.) (2013), ‘The Politics of Structural Reforms’, *Social and Industrial Policy Change in Italy and Japan*, Cheltenham: Edward Elgar.

Martin, C. J. and D. Swank (2012), *The Political Construction of Business Interests. Coordination, Growth, and Equality*, Cambridge: Cambridge University Press.

Milgrom, P. and J. Roberts (1992), *Economics, Organization and Management*, Englewood Cliffs, NJ: Prentice Hall.

Müller, T. and T. Schulten (2014), ‘Wages and Collective Bargaining Collective Bargaining during European Economic Crisis. Developments in the European manufacturing industry’, *Report Industry All, European Trade Union, presented at the Collective Bargaining and Social Policy Conference*, Vienna, 12–13 June 2014.

Ok, W. and J. Yang (2012), ‘The Korean Economy between Two Economic Crises: Hybridization and Convergence towards a Market-Led Economy?’, in R. Boyer, H. Uemura and A. Isogai (eds.), *Diversity and Transformations of Asian Capitalisms*, Abingdon and New York: Routledge, pp. 209–228.

Pagano, U. (2011), ‘Interlocking Complementarities and Institutional Change’, *Journal of Institutional Economics*, 7(3): pp. 373–392.

Palombarini, S. (2001), *La Rupture du Compromis Social Italien. Un Essai de Macroéconomie Politique*, Paris: CNRS Editions.

Peck, J. and N. Theodore (2007), 'Variegated Capitalism',. *Progress in Human Geography*, **31**(6): 731–772.

Rhein, T. (2013), 'Erwerbseinkommen. Deutsche Geringverdiener im Europäischen Vergleich', *IAB-Kurzbericht* 15/2013, Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung.

Schnyder, G. (2012), 'Like a Phoenix from the Ashes? Reassessing the Transformation of the Swedish Political Economy since the 1970s', *Journal of European Public Policy*, **19**(8): 1126–1145.

Schulten, T., T. Brandt and C. Hermann (2008), 'Liberalisation and Privatization of Public Services and Strategic Options for European Trade Unions', *Transfer*, **14**(2): 295–311.

Soskice, D. (1999), 'Divergent Production Regmes: Coordinated and Uncoordinated Market Economies in the 1980s and 1990s', in H. Kitschelt et al. (eds.), *Continuity and Change in Contemporary Capitalism*, Cambridge: Cambridge University Press, pp. 101–134.

Streeck, W. (2005), 'Requirements for a Useful Concept of Complementarity', *Socio Economic Review*, **3**(2): 363–366.

Streeck, W. (2011), '*Re-Forming Capitalism. Institutional Change in the German Political Economy*', Oxford and New York: Oxford University Press.

Streeck, W. and K. Yamamura (eds.) (2001), *The Origins of Nonliberal Capitalism: Germany and Japan in Comparison*, Ithaca, NY: Cornell University Press.

Terra Nova (2011), *Projet 2012. Contribution N°1. Gauche: Quelle Majorité électorale Pour 2012?*, Paris: Terra Nova.

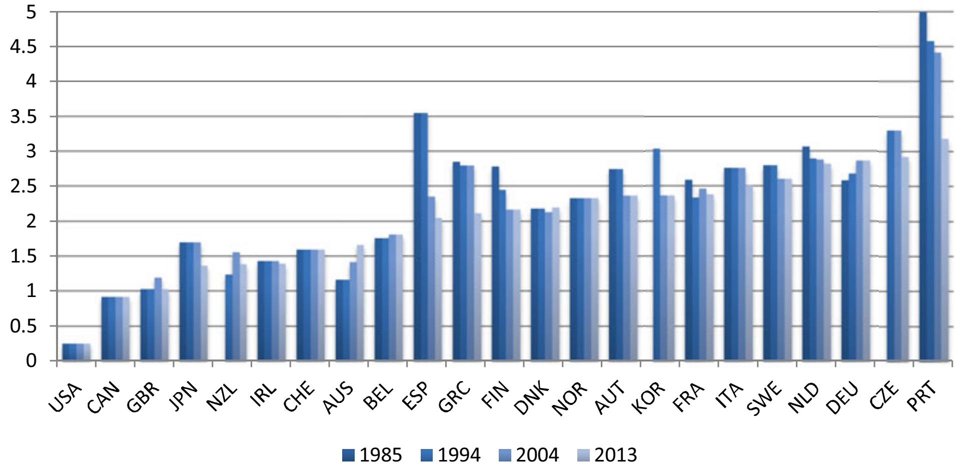
Thelen, K. (2014), *Varieties of Liberalization and the New Politics of Social Solidarity*, Cambridge: Cambridge University Press.

Topkis, D. M. (1998), *Supermodularity and Complementarity*, Princeton: Princeton University Press.

Yamada, T. (2000), 'Japanese Capitalism and the Companyist Compromise', in R. Boyer and T. Yamada (eds.), *Japanese Capitalism in Crisis. A Régulationniste Interpretation*, London: Routledge, pp. 19–31.

Yamada, T. and Y. Hirano (2012), 'How has the Japanese mode of Regulation Changed?', in R. Boyer, H. Uemura and A. Isogai (eds.), *Diversity and Transformations of Asian Capitalisms*, Abingdon and New York: Routledge, pp. 15–30.

Appendix Figure 1. (Colour online) Employment protection Legislation indicators for regular contracts, OECD countries, 1985 to 2013.



Appendix Figure 2. (Colour online) Employment protection Legislation indicators for temporary contracts, OECD countries, 1985 to 2013. Data source: OECD.