

# 6

## Poland and Ukraine: Institutional Structures and Economic Performance

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This chapter uses the varieties of capitalism (VoC) approach to outline and conceptualize the major current features of the emerging capitalist systems in two large neighbouring post-communist countries. It follows potential linkages between different institutional forms of post-communist capitalism, examining whether the newly emerged institutional forms of post-communist capitalism function as complementary systemic elements, and changes in the revealed comparative advantage of the Polish and Ukrainian economies. This is then related to the social and macro-economic performance of the two countries in the last phases of transition. The chapter relies on primary analysis, based mainly on new international comparative sets of institutional, foreign trade, and macro-economic performance-related data.

In the path-dependent tradition (see Stark and Bruszt 1998; 2001), I view 'post-communist capitalism' as a generic term, that is, not as one socio-economic formation in transit towards one pure competitive market-based capitalism, but as capitalism in the making after the collapse of state socialism in Eastern Europe. This chapter argues that there are a number of dissimilarities between the institutional frameworks of Polish and Ukrainian capitalisms as well as between them and the major Western examples of modern capitalism. Nevertheless, both appear to be representative cases of what Elena Iankova (2002) has labelled a 'dynamic hybrid' Eastern European capitalism or what Hall and Soskice (2003) have described as 'mixed' or 'weakly-coordinated' market economies (see also Rhodes *et al.* 2005).

Differences in the macroeconomic and social performance of the two economies are highlighted by an application of Bela Balassa's concept of 'revealed comparative advantage' (Balassa 1965; 1989). This indicates differences between the countries in the generation of industrial and trade specialization. It also reveals substantial historical continuity in their

competitive advantages. The question of why and how this kind of post-communist capitalism has been constructed in Poland and Ukraine is briefly addressed in the concluding section.

### What type of capitalism in Poland and Ukraine?

The main assumption of the theorists working on the VoC theme is that the alleged superiority of liberal market-based economies needs to be qualified. As Amable has argued, it is not only deregulated markets and stock market-based financial systems that can deliver good growth performance (2003: 218). The VoC framework allows one to abandon the constraints imposed by the fundamental assumption of the dominant neo-liberal transition paradigm that, in order to progress and succeed, all post-communist countries must transit towards the singular destination of Anglo-American capitalism. The VoC approach implies that – besides the Anglo-American or rather Anglophone<sup>1</sup> model of competitive liberal capitalism – there are a number of other effective and efficient transformation ends which can be better suited to the inherited and newly constructed institutional complementarities and comparative advantages of the emerging market economies of the post-communist world.

My investigation follows Bruno Amable's (2003) analysis of modern capitalism, concentrating on the following elements of the Polish and Ukrainian political economies: product-market regulation, the wage-labour nexus and labour-market institutions, the financial system and corporate governance, the social protection sector, and the education and knowledge sector. For the comparative analysis of post-communist capitalism in Poland and Ukraine, I adopt the established methodology based on the extensive database compiled by the OECD research staff in the late 1990s and early 2000s. The missing institutional indicators, chiefly for Ukraine, presented in this section are my own calculations, scores, and estimates constructed from primary sources and national data using the respective OECD techniques and methods. The institutional features of the two post-communist political economies are compared against each other and against countries that are found in the literature (see Amable 2003: ch. 5; cf. Hall and Soskice 2001; 2003) to be the most extreme representative cases of five different ideal types of modern capitalism, namely Finland (epitomizing social-democratic economies or the Scandinavian model), Germany (coordinated market economies or the Continental European model), Italy (mixed-market economies or the Mediterranean model<sup>2</sup>), South Korea (coordinated market economies or Asian capitalism), and the United Kingdom (liberal market economies or the Anglophone model).

### Product-market competition

The nature, form, and intensity of competition between firms in the markets of goods and services are determined by public regulation. This is the first fundamental institutional domain that is believed to differentiate existing models of capitalism. Nicoletti, Scarpetta and Boylaud (2000) of the OECD have collected and formatted a database of internationally comparable data and provided a multi-stage estimation of indicators of regulation that summarize the extensive information on the regulatory environments characterizing OECD member states (see also Conway, Janod and Nicoletti 2005). They have constructed seventeen detailed indicators to describe the regulatory environment in the product market. They were classified in the three broad regulatory domains of state control over business enterprises, barriers to entrepreneurship, and explicit barriers to international trade and investment.

On the basis of factor analysis matrices and other techniques developed by Nicoletti *et al.* (2000), and using the relevant Ukrainian regulatory policy documents and other legislation, I have compiled a number of detailed and summary indicators of product-market regulation in Ukraine and made the necessary comparative scores. Table 6.1 on page 135 presents the summary indicators of the product-market regulatory framework effective as of 2003–2004 in the three domains mentioned above for Ukraine, Poland, Finland, Germany, Italy, Korea, and the UK.

The data indicate that Polish capitalism is characterized by relatively heavily regulated product markets; government involvement in the economy, a large public sector, a relatively high level of coordination of economic agents through non-market signals, administrative burdens for entrepreneurship, and trade and investment protectionism. On average, the reported degree of product-market regulation in Poland appears to be moderately high or what the OECD (Conway *et al.* 2005) has described as 'relatively restrictive', placing it among the paragons of Amable's 'Mediterranean' and 'Asian' capitalisms or Hall and Soskice's mixed and coordinated market economies (e.g. Greece, Italy, France, Spain, and Korea).

Ukrainian capitalism is also characterized by relatively heavy product-market regulation: the involvement of the state is far-reaching and the formal protection of domestic product markets and administrative burdens and barriers to entrepreneurship are relatively high. On average, the Ukrainian regulatory framework is analogous to the South European model, as exemplified by Italy. Thus, both the Polish and Ukrainian types of formal product-market regulation fit generally into the ('weakly') coordinated or mixed market economy models of Hall and Soskice, or the Mediterranean model of Amable.

### The wage-labour nexus and labour market institutions

The second institutional arena to be examined concerns industrial and employment relations and the institutions which govern them. The OECD research staff have developed a comprehensive technique to analyse employment protection legislation, based on fifteen detailed indicators of its strictness (Nicoletti *et al.* 2000; reviewed in OECD 2004: ch. 2). They have grouped these indicators into two broad domains of provisions for workers with regular contracts and of provisions affecting workers with fixed-term contracts or employed through temporary work agencies.

Table 6.1 (p. 135) presents the results of the factor analysis for regulation affecting regular and temporary contracts in Poland, Ukraine, and the five representative countries of major models of modern capitalism. It shows that, in general, in 2003 Poland was characterized by a moderate level of employment protection, analogous to that of social-democratic economies, such as Finland. Ukraine, on the other hand, appears to have much less flexible labour-market regulation, close to the level of employment protection attributed to the Continental and Mediterranean European economies of Germany and Italy and well above all other cases.

The second aspect of the wage-labour nexus that can be compared is industrial relations. The major variables considered here concern wage-bargaining centralization and corporatism, trade union density, practices of national social dialogue and relations between managers and employees evaluated through the collective agreement coverage and the number of industrial disputes, the effectiveness of collective bargaining analysed through the actual degree of wage differentiation in the industry and, finally, the degree of state intervention in labour markets and government commitment to supporting the unemployed.

It appears that the major features of Polish industrial relations are decentralized wage-bargaining and weak coordination, a low level of unionization, and narrow collective agreement coverage. Relations between managers and employees in Poland are non-confrontational, as the small scale of industrial disputes indicates. The moderate level of collective bargaining coverage, well above the actual union membership, signals some involvement by the state in industrial relations. However, the combination of employment protection and decentralized, company-based wage bargaining in Poland resembles very closely the regulated labour markets of Asian capitalism, as exemplified by Korea.

Ukraine's industrial relations are characterized by a high degree of wage-bargaining centralization and extensive coordination, a high level of trade union density, and broad collective agreement coverage. As regards the

degree of wage-bargaining coordination, Ukraine's industrial relations have retained strong neo-corporatist features and the country's wage-labour nexus is clearly different from the Anglophone model. Table 6.2 shows that the Ukrainian pattern of capital-labour relations has similarities with both the social-democratic and Continental European models, as indicated by the wide coordination of wage bargaining, non-confrontational relations between managers and employees in the country, and the relatively high collective bargaining coverage.

Yet, with some limitations, the wage-labour nexus in both Poland and Ukraine can be described as 'tripartism' or the 'tripartite coordination' defined by Iankova (2002: 11) as a new post-communist species of institutionalized compromise amongst social actors in the industrial arena. This, she argues, 'developed as a dynamic hybrid characterised by political negotiations (rather than Western Europe's neo-corporatist bargaining over purely social and economic conditions)'. It represents a broad civic arrangement rather than just a coordination of the interests of labour, business and the state and it links actors at various levels. The complexity of post-communist 'tripartism' as a broad, accommodating, and civic arrangement appears to be the main difference between the Polish and Ukrainian labour market institutions and their Western European counterparts. However, these complex, multilevel political structures of 'tripartism' have coexisted with very broad inter-sectoral variance in the degree of centralization and coordination of wage bargaining, wage 'flexibility', limited active employment policy, and a low level of direct state support.

Table 6.1 demonstrates that the extent of state intervention and public commitment in Poland's and Ukraine's labour markets, summarized by the simple average net replacement wage in the early 2000s, has been low and close to the Anglophone liberal market economy model, exemplified by Great Britain. However, 'tripartism' in these two countries has involved relatively high employment protection and consensual industrial relations. In the Ukrainian case of what can be described as 'hard' tripartism, trade unions have benefited from massive membership support and statutory provisions for mandatory collective bargaining coverage concerning regular permanent employees. The Polish case of 'soft' tripartism has been characterized by much weaker trade unions and narrower collective bargaining coverage.

### **Financial intermediation and corporate governance**

Capital markets and corporate control represent the third distinctive institutional domain of modern capitalism. Table 6.2 (p. 137) – summarizes

a number of fundamental indicators that are typically used to evaluate the financial intermediation sector. The financial systems of both Poland and Ukraine appear to be underdeveloped. Although the Polish capital market appears to be slightly bigger than the Ukrainian one, the overall size of the financial sector is very small in both countries. The two financial systems are bank-based, elementary, and with low levels of banking concentration.

The observed weaknesses of the Polish and Ukrainian financial markets are accompanied by mediocre corporate governance standards and relatively poor business environment provision. In 1999, 2002 and 2005 the World Bank and the European Bank for Reconstruction and Development conducted three large-scale qualitative surveys of the business environment and enterprise performance in twenty-six post-communist countries. The BEEPS (Business Environment and Enterprise Performance Survey) 2002 survey covered 6,100 firms, including 500 in Poland and 463 in Ukraine (see World Bank 2005a). According to this qualitative assessment of the business environment by both Polish and Ukrainian entrepreneurs, firm managers and other representatives of the business community, tax-action, finance, and corruption were the three most significant obstacles to doing business. On the scale from 1 (minor obstacle) to 4 (major obstacle), the average score of the Ukrainian business environment in 2002 was 2.22 while for Poland it was 2.45. Compared with other post-communist countries, Poland's business environment was ranked the second worst (25th position out of 26 countries), between Moldova (24th) and Albania (26th). Ukraine's position was seventh worst (20th), between Bulgaria (19th) and Bosnia and Herzegovina (21st) (author's calculation on the basis of Fries, Lysenko, and Polanec 2003).

In terms of the market for corporate control, evaluated through the importance of foreign direct investment, cross-border takeovers, mergers and acquisitions, by the mid 2000s the Polish financial intermediation sector was relatively more developed than its Ukrainian counterpart. The third section of Table 6.2 indicates that there was more active direct investment, and more merger and acquisition activity by foreign companies in Poland. Ukraine's financial-intermediation sector lagged behind all the comparators used here.

### **Social protection and the welfare system**

The social protection systems of Poland and Ukraine appear closer to established models. A number of typologies have been developed (Amable 2003: 154–60; Ebbinghaus and Manow 2001) and prevailing opinion

groups the USA, Australia, Ireland, Canada, Japan and Korea (that is most of the countries of the market-based and Asian capitalism models, except for the UK) within the liberal 'residual welfare' model (or the weak, non-welfare, 'zero-level' model of social protection). The United Kingdom, the Netherlands, Spain and Portugal are said to possess liberal, 'minimal-universal' welfare systems. The welfare systems of the remaining Continental European countries are characterized as the 'conservative corporatist' type of welfare state, in which the remaining Mediterranean countries are regarded as belonging to a slightly less generous 'Latin' subtype. The Nordic countries are said to belong to the 'maximal-universal', social-democratic model of the integral welfare state.

The welfare systems of the two post-communist countries are analysed here by comparing the levels of general government sector outlays and public social expenditure in Poland and Ukraine with the variety of advanced capitalist countries. Table 6.2 indicates that, with almost identical shares of public social spending in Poland's and Ukraine's GDP of about 22.3 per cent between 2002 and 2006, marginally below the UK level, the welfare systems of both countries have drifted towards the 'minimal-universal' system of social protection. However, it is contended that in the case of Poland the welfare state's recent development trajectory was downwards from the 'Latin paternalist' subtype of the conservative Continental European welfare model (as exemplified by Italy), whereas in the Ukrainian system social protection has expanded from the liberal 'residualist' non-welfare model.

This is supported by the analysis of shifts in the degree of government intervention in the two economies. The average shares of general government sector expenditures to GDP in Poland have been relatively large and comparable with the Continental European and Mediterranean examples (cf. Germany and Italy). In turn, under post-communism Ukraine has experienced a drastic reduction in the level of government involvement in the economy to the levels associated with the Anglophone model of liberal market economies. Thus, the surprisingly similar levels of public social spending registered in the two post-communist countries in the 2002–6 period suggest a relative reversal in the two welfare states' developments.

### The education sector

The education sector is considered the fifth institutional foundation on which a nation's comparative advantage can be built. Historically, both the Polish and Ukrainian education systems were formed under the influence

of the Russian Imperial educational system and the Continental European models of France and Germany (Aventur, Campo and Möbus 1999). Both have high levels of curricula standardization and mainly school-based vocational training and professional education. The major difference between the Soviet Ukrainian educational system and its Central European counterparts, however, was in the lower degree of differentiation between 'general' and 'vocational' programmes in the former. Under post-communism, some of the inherited institutional features of the Polish and Ukrainian systems of training and education have been retained, whereas others have experienced major changes.

Table 6.2 provides a synopsis of several contemporary educational and science indicators for Poland, Ukraine and the chosen comparators. It indicates that Poland's system has been characterized by the emphasis on publicly funded institutions and by relatively short mandatory schooling. Poland's education sector is further characterized by the low importance and weak private funding for R&D activities. Life-long learning and continuing professional training play no major role. Several of the indicators indicate close similarities to the Mediterranean model, as exemplified by Italy. The most distinctive feature of the Polish education system appears to be its very low production of science- and industry-related specialists. The Ukrainian education system has been characterized by relatively high public expenditure, low enrolment rates and a relatively short period of 'school life', i.e. time spent within the formal education system. As in Poland, life-long learning and continuing professional training are of relatively low importance. The main differences between the two systems have been Ukraine's emphasis on university-level education in contrast to Poland's priority to spending on primary education and the greater role of non-governmental funding for R&D in Ukraine.

### Macroeconomic performance

This section follows the impact of these institutional forms on the macro-economic performance of Poland and Ukraine, focusing on economic growth, investment, and employment between 1995 and 2005, well after the initial exogenous shocks associated with the collapse of state socialism had settled.

As indicated in Figure 6.1 both countries enjoyed broadly positive – albeit unstable – rates of growth in these indicators. However, the data in Tables A.7, A.8 and A.9 in the Statistical Appendix show major differences in the countries' performance in respect to unemployment, the distribution of income, and absolute poverty. Unemployment, measured from

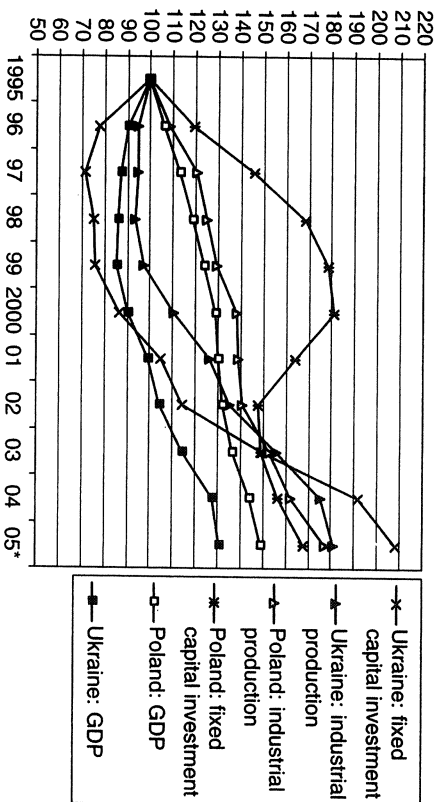


Figure 6.1 Key economic indicators for Poland and Ukraine, 1995 to 2005, as per cent of the 1995 level.

Note: '2005 figure is for the first seven months only.

Sources: Author's calculations on the basis of GUS (various years); Derzhkomstat (various years).

national labour force surveys, increased in both countries, but was only 8.7 per cent in Ukraine compared with 18.9 per cent in Poland in 2005 (GUS 2006d; Derzhkomstat 2006e). Moreover, by 2004, Ukraine returned to a more equitable distribution of income and consumption. The phenomenon of absolute poverty was also tackled better in Ukraine than in Poland or in most of the other post-communist economies.

The VoC approach helps to explain socio-economic peculiarities of the two post-communist economies. The reported differences between Poland's and Ukraine's poverty and income inequality indicators appear to indicate the early positive outcomes of Ukraine's expanding social protection sector *vis-à-vis* Poland's contracting welfare state. The observed difference in unemployment trends support the VoC theoretical assumption that relatively more decentralized and deregulated labour markets are not compatible with regulated product markets and thus should result in higher levels of unemployment (as in the case of Poland) than one would expect in a country with more cocommunicated labour markets and regulated product markets (as in the case of Ukraine).

### Revealed comparative advantages

A central prediction of the VoC approach is the existence of a strong link between countries' institutional design and the type of scientific,

technological and industrial activities in which they specialize (Hall and Soskice 2001: 36–44; Amable 2003: 197–200). Thus, as Amable's analysis demonstrates (2003: 200–9), the Mediterranean model countries have a strong orientation towards 'traditional' resource-based and low technology industries which appears to complement the relative weakness of their education systems. Similarly, Hall and Soskice link Germany's institutional framework to its comparative advantage in medium technology industries, such as general industrial machinery, transport equipment, metalworking machinery, machine tools, electric household-type appliances, and chemical products (2001: 36–44).

To discover and compare any potential comparative institutional advantages between Poland and Ukraine, this chapter will apply the most typical measurement – Bela Balassa's revealed comparative advantage index (Balassa 1965; 1977; 1989). The revealed comparative advantage (RCA) index compares the export share of a given sector in a country with the export share of that sector in the world market. When the index is unity for a given sector in a given country, the export share of that sector is identical to the average for all countries in the world. When the index is greater than unity, with a range from one to infinity, the country is said to have a relative comparative advantage in that sector. When the index is below one, ranging down to zero, the country is said to have a relative weakness in that sector.

UNCTAD (2006a) provides the three-digit SITC product code of annual exports and imports for over 230 types of products from the total of 67 branches of agriculture, mining and quarrying, manufacturing, and electricity supply. To examine the shifts in RCAs of the two countries under post-communism, whilst minimizing possible ad hoc changes in the national foreign trade structures, I use the average figures for exports for the 2001–2002 period as the end-point of post-communist transformation. To ease understanding of the patterns, the SITC-based data were converted into the International Standard of Industrial Classification data groups.

Table 6.3 (p. 141) contains the RCA indexes for Poland and Ukraine for 2001–2002. It shows that, even after a decade of transition, both countries retained their traditionally strong comparative advantages. It appears that as late as 2002, Poland's major strength was in shipbuilding, whereas Ukraine's key competitive sector was iron and steel. Although the revealed comparative advantages of the two economies may appear to be analogous to those of the less advanced OECD member states, their strongest resemblance is to their pasts under state socialism. The five most competitive Polish manufacturing industries were shipbuilding, furniture,

fabricated metals (non-machinery), rubber and plastics, and wearing apparel. In turn, iron and steel, railway vehicles, coke, non-ferrous metals, and wood (non-furniture) were Ukraine's most competitive manufacturing branches. On the other side of the RCA spectrum, the weakest Polish industries in terms of competitiveness were aerospace, pharmaceuticals, medical, precision and optical equipment, and office and computing machinery. The weakest branches of Ukrainian manufacturing were radio, TV and communication equipment, pharmaceuticals, motor vehicles, and office and computing machinery. According to Table 6.3, the major difference between the revealed comparative advantages of the two economies lies in the overall number of competitive manufacturing industries rather than in the nature of their innovative and technological capacities. In 2001–2002, on average, there were almost twice as many internationally competitive Polish as Ukrainian manufacturing industries, which might be attributed to Poland's relatively more developed sector of financial intermediation and the country's large FDI in-flows with potential technology spillovers.

The Voc claims about the institutional foundations of comparative advantage, especially the approach's emphasis on radical innovation – as, for example, in the pharmaceuticals industry – as the attribute of LMEs and incremental innovation – as in heavy engineering – as the attribute of CMEs, have been questioned by a number of authors. Matthew Watson (2003) has argued that it is not different models of capitalism but fundamental features of the social structure of accumulation and the geopolitical division of power which can explain cross-national differences in specialization, trade and comparative advantage. A robust empirical investigation by Mark Z. Taylor has revealed that 'the existing evidence depends heavily on the inclusion of a major outlier, the United States, in the class of liberal market economies' (2004: 625). Moreover, all the most radically innovative countries of the world, including Japan, Canada, the United Kingdom, Israel, and Taiwan, have strong military ties with the USA. Taylor has therefore suggested concentrating more on international relations than on domestic institutions to explain the political economy of comparative rates of innovation. The evidence in this chapter suggests that, in addition, *past* dependence is a crucial factor in explaining comparative advantages of post-communist economies.

### Conclusion: post-communist capitalism

The core features of the two forms of post-communist capitalism in Poland and Ukraine are summarized in Table 6.1. It shows that the two political

Table 6.1 Summary features of post-communist capitalism in Poland and Ukraine, early 2000s

<i>Institutional arena</i>	<i>Poland</i>	<i>Ukraine</i>
Product markets	'Relatively restrictive' product-market regulation	'Relatively restrictive' product-market regulation
Wage-labour nexus	'Restrained tripartism'	'Hard tripartism'
Finance	Elementary, small, bank-based system	Underdeveloped, small, bank-based system
Welfare	Contracting conservative 'Latin' welfare state	Expanding liberal 'universalist' welfare state
Education	Weak 'general skills' public education system	Weak, 'polytechnic skills' public education system

economies share a large number of institutional characteristics, including regulated product markets, the 'tripartite' regulation of the wage-labour nexus, elementary and bank-based financial-intermediation sectors, public education systems, and similarly endowed welfare states.

However, each of the two capitalisms appears to be at a formative stage, characterized, at least at a theoretical level, by a number of complementary features. Although both of the two domestic finance sectors are currently bank-based, which is fairly complementary with the other institutional features of the two post-communist political economies, the financial systems in Poland and Ukraine remain immature and weak in comparison with any of the existing models of modern capitalism. Furthermore, in the case of Poland, the wage-labour nexus, which is based on 'soft' regulation, is not entirely complementary with the overall logic of the national type of regulated capitalism. Competitive labour markets can make structural adjustment less costly if the released labour is quickly absorbed by low-wage, small and medium-sized firms or business startups. These are held back in Poland by economic and administrative barriers to entry.

In turn, Ukraine's limited welfare system is, at least theoretically, incompatible with the overall institutional logic of the regulated capitalism model towards which the country has been evolving. A minimal public-funded social protection system does not protect against unemployment and fluid labour markets are therefore necessary. Low protection for specific skills investment provides incentives for individuals to acquire general

skills in order to move from job to job and make retraining easier. All these institutional effects that typically emanate from a minimal social protection system contravene the inner workings of a regulated market economy based upon industry-specific knowledge and skills.

The discussion about the reasons behind the establishment of post-communist capitalism and about domestic political and exogenous factors which have contributed to, and influenced the construction of, such types of capitalism in Poland and Ukraine is undeveloped. However, it has been argued elsewhere that it was Poland's consensual political regime that structured the particular political choices generated in the partisan struggles of post-communism to produce its heavily regulated variant of capitalism. In turn, although Ukraine's chief executive office was occupied by a centre-right figure for a much longer period than in Poland, a large number of built-in veto mechanisms combined with the overall ideological fragmentation in the country have pushed the post-communist political struggles towards more consensual decision-making. As a result, post-communist capitalism in Ukraine, as in Poland, has acquired practically none of the attributes of the Anglophone model and institutional change in the country, and in the region, was directed towards a social compromise formed around the construction of the 'social-market' neo-corporatist model of regulated capitalism (Mykhnenko 2005: ch. 8).

Notwithstanding some unambiguous differences in terms of short- and long-term performance generated by the two economies in the 1990s and early 2000s, the majority of more recent macro- and socio-economic indicators of Poland and Ukraine have been similar. This may be interpreted as the outcome of positive returns on complementary institutions established within the two post-communist political economies. However, no particular linkage has been discovered between the current institutional designs of the two economies and their revealed comparative trade advantages and industrial specializations. It appears that the exclusive focus on the institutional forms of the two national models of production, consumption and distribution, and on their endogenous micro-logic – developed in accordance with the VoC framework – provide only a partial explanation for the trajectories and variations in macroeconomic performance of post-communist countries. It seems that future research should focus less on contemporary national regulatory frameworks and domestic institutions and more on the historical legacies and industrial assets of the state-socialist past and on international relations and global power networks. These have a more immediate effect on the performance of Eastern European economies.

Table 6.2 Major indicators of five core institutional domains in selected economies, late 1990s – early 2000s

		Finland	Germany	Italy	Korea	Poland	UK	Ukraine
Product markets, 2003								
Overall level of regulation, 0–6 from the least to the most restrictive of which:		1.3	1.4	1.9	1.5	2.8	0.9	1.9 (2004)
	State control	2.3	2.2	3.2	1.7	3.6	1.7	3.0 (2004)
	Barriers to entrepreneurship	1.1	1.6	1.4	1.7	2.3	0.8	1.6 (2004)
	Barriers to trade and investment	0.6	0.6	1.1	1.3	2.4	0.4	1.1 (2004)
Labour markets, 1999–2004								
Overall level of employment protection legislation, 0–6 from the least to the most restrictive, 2003		2.12	2.47	2.44	2.00	2.14	1.04	2.50
Levels of collective bargaining, maximum score is 5 divided over three levels, 1999–2001 of which	Intersectoral	xxx						x
	Sectoral	x	xxxx	xxx	x	x	x	xxx
	Company	x	x	xx	xxxx	xxxx	xxxx	x
Union density, 2000	% of employees	76.2	25.0	34.9	11.4	14.7	31.2	67.9 (2003)
Collective bargaining coverage, 2000	% of employees	92.5	68.0	82.5	12.5	42.5	32.5	68.6 (2003)
Days lost due to strikes, 2000–4 average	per 1,000 employees	42.52	3.22	137.51	112.65	1.63	28.8	2.64
Wage differentiation within manufacturing (the ratio of	(latest available year)	1.86	1.85	n/d	3.29	3.73	2.08	6.64

(Continued)

Table 6.2 (Continued)

		Finland	Germany	Italy	Korea	Poland	UK	Ukraine
the average wage of the highest paid industry to the lowest paid industry, 2003–4								
Initial net replacement rates of unemployed up to 12 months, simple unweighted average for all types of families, forms of employment and level of income,* 2002	% of previous wage	74.3	76.5	60.2	56.4	53.0	48.5	40.9
Finance, 2000–4								
Sum of domestic assets of deposit money banks and market capitalization, 2003	as % of GDP	164.24	181.85	136.27	143.02	54.09	261.56	29.95
Ratio of deposit money bank assets to market capitalization, 2003		0.70	3.92	2.64	1.99	2.53	1.19	3.28
Total private credit, 2003	as % of GDP	61.46	117.39	82.54	119.91	28.13	141.3	19.71
Life and non-life insurance penetration, premium volume, 2003	as % of GDP	8.69	7.08	7.58	9.82	2.99	13.73	3.46
Bank concentration: three largest banks' assets as % of all commercial bank assets, 2003		88.91	63.72	40.52	47.79	41.86	42.68	49.04
Central bank assets, 2003	as % of GDP	0.01	0.21	4.21	1.04	0.43	0.67	7.35
Foreign direct investment cumulative stock	per capita, US\$, 2004	10,686.5	4210.2	3803.4	1161.2	1593.1	12,973.6	196.2
	as % of GDP, 2003	28.57	16.08	12.34	9.03	26.75	33.86	15.86
Mergers and acquisitions, cross-border deals, 2000–4	Total number of sales per period	362	1179	651	203	406	2826	85
	Total value of sales per period, US\$ mn	22,380	403,261	65,801	24,865	18,017	391,050	576
Welfare and the state, 2002–6 average								
Public social expenditure, estimate***	as % of GDP	25.56	27.09	24.52	6.60	22.26	23.28	22.34
General government total outlays	as % of GDP	50.66	47.70	49.15	26.94	46.04	43.47	39.18
Education, 2002–4, latest year available								
Years of compulsory education		10	13	9	9	9	12	9
Gross enrolment ratio, all levels combined, except pre-primary	as % of all people of eligible age**	107.8	88.9	86.8	93.9	90.4	119.0	85.6
School life approximation, all levels combined	years	18.3	15.8	15.6	16.0	15.6	21.3	13.4
Continuing learning and training, participation rate, late 1990s early–2000s	as % of total workforce	50.4	25.4	25.3	22.0	16.0	50.0	10.0
Public expenditure on education	as % of GDP	6.4	4.8	4.7	4.2	5.6	5.3	5.4
	as % of total government expenditure	12.7	9.5	10.3	15.5	12.8	11.5	20.3
Educational expenditure by level as % of total educational expenditure:	pre-primary	5.4	8.4	8.6	1.2	7.9	8.6	11.2
	primary	21.6	14.3	25.8	34.0	33.7	23.6	8.8
	lower secondary	17.1	30.6	19.5	20.4	17.3	14.8	22.0
	upper secondary	23.5	17.9	26.6	23.0	20.6	33.6	9.4
	post-secondary	–	2.2	1.0	–	0.9	–	6.0
	non-tertiary							
	tertiary	32.5	24.6	18.5	8.1	19.5	20.6	34.0

(Continued)



Table 6.2 (Continued)

	Finland	Germany	Italy	Korea	Poland	UK	Ukraine	
Total science and technology graduates	not allocated by level	–	2.1	–	13.3	0.5	–	8.7
Researchers per million inhabitants	as % of total tertiary graduates	28	26	23	39	12	26	26
Total gross domestic expenditure on R&D (GERD)	as % of GDP	7431	3222	1156	2979	1469	2691	1749
Government expenditure on GERD	as % of total GERD	3.46	2.64	1.11	2.91	0.59	1.88	1.18
		26.1	31.9	50.8	23.9	61.1	26.9	37.4

Notes: \*Average net replacement rates are calculated as unweighted averages for: (a) earnings levels of 67%, 100% and 150% of average production wage; (b) single-parent households and married couples with one or two working spouses; (c) households with no, one or two children; net replacement rate equals gross personal income received from unemployment and other social benefits after mandatory tax deductions. Ukraine's figure is for 2004 onwards.

\*\* The enrolment ratio is the ratio of enrolled children of the official age for the education level indicated to the total population of that age. Enrolment ratios exceeding 100 per cent reflect discrepancies between these two data sets. A further discrepancy may arise from school pupils repeating a grade who are included in the data set with younger enrolled children of the official age for the same education level.

\*\*\* Estimate is based on the latest available ratio of general government to public social expenditures and the current levels of general government sector expenditure.

Sources: Beck, Demirgüç-Kunt and Levine (2006); Carley (2002); CMU (2004a, 2004b); Conway, Janod, and Nicoletti (2005); Derzhkomstat (2004); Elmeskov, Martin, and Scarpetta (1998); FEDEE (2005); Halyts'ki Kontrakty (1998); ILO (2006); IMF (2005); Kupets (2004); MLSPU (2005a, 2005b, 2005c); Nicoletti, Scarpetta, and Boylaud (2000); OECD (2006a, 2006b, 2006c, 2006d); Seniv (2004); TUFU (2005); UNCTAD (2006a); UNESCO (2006a, 2006b, 2006c); Visser (2000); VRU (1971, 1991a, 1991b, 1992, 1996, 2000a, 2000b, 2003a, 2003b); World Bank (2004, 2005a, 2005b); and author's own calculations, scores, and estimates.

Table 6.3 Revealed comparative advantage indexes for Poland and Ukraine by manufacturing industry, 2001–2002 average

Industry	Poland		Ukraine	
	Index	Industry	Index	Industry
<i>Strong comparative advantage (&gt;2.0):</i>				
Ship-building	7.58	Basic iron and steel	13.62	
Furniture	2.77	Railway and transport equipment nec	2.63	
Fabricated metal products	2.61	Coke, refined petroleum and nuclear fuel	2.43	
Rubber and plastics	2.33	Basic precious and non-ferrous metals	2.06	
Wearing apparel and fur	2.10	<i>Comparative advantage (&gt;1.0):</i>		
<i>Comparative advantage (&gt;1.0):</i>		Wood and cork	1.71	
Other non-metallic mineral products	1.96	Wearing apparel and fur	1.35	
Paper	1.83	Food and drink	1.27	
Wood and cork	1.81	Chemicals	1.16	
Basic precious and non-ferrous metals	1.69	<i>Comparative disadvantage (&lt;1.0):</i>		
Railway and transport equipment nec	1.48	Rubber and plastics	0.94	
Electrical machinery and apparatus	1.46	Leather and footwear	0.85	
Basic iron and steel	1.40	Shipbuilding	0.83	
Publishing and printing	1.36	Fabricated metal products	0.78	
Food and drink	1.27	Machinery and equipment nec	0.75	
Machinery and equipment nec	1.17	Paper	0.75	
<i>Comparative disadvantage (&lt;1.0):</i>		Tobacco	0.74	
Motor vehicles	0.99	Other non-metallic mineral products	0.72	
Coke, refined petroleum and nuclear fuel	0.86	Aerospace	0.66	
Textiles	0.84	<i>Strong comparative disadvantage (&lt;0.5):</i>		
Leather and footwear	0.82	Electrical machinery and apparatus	0.47	
Radio, TV and communication equipment and apparatus	0.73	Textiles	0.32	
Chemicals	0.69	Medical, precision and optical instruments	0.24	
Tobacco	0.50	Publishing and printing	0.22	

(Continued)

Table 6.3 (Continued)

Poland		Ukraine	
Industry	Index	Industry	Index
<i>Strong comparative disadvantage (&lt;0.5):</i>		Furniture	0.19
Aerospace	0.21	Radio, TV and communication equipment and apparatus	0.15
Pharmaceuticals	0.21	Pharmaceuticals	0.11
Medical, precision and optical instruments	0.17	Motor vehicles	0.10
Office, accounting and computing machinery	0.13	Office, accounting and computing machinery	0.03

Note: nec – not classified elsewhere; author's conversion of SITC Rev. 2 data into ISIC Rev. 3 data groups.

Source: Author's own compilations and calculations on the basis of UNCTAD (2006a).

## Notes

1. Colin Crouch argues that the 'Anglo-Saxon' model 'is in fact used entirely consistently to identify that group of countries where English is the dominant language and the majority population is white-skinned: the UK, Ireland, the USA, Canada, Australia, and New Zealand. The correct, unambiguous term, which precisely identifies this group of countries is "Anglophone", and one wonders why this clear and accurate term is not used instead of the more popular, exotic but highly dubious alternative' (2005: 45).
2. According to Amable's factor analysis, Greece is the most extreme exemplar of Southern European economies (2003: 176–7). However, due to the acute lack of comparable data concerning major institutional indicators of Greece, Italy – the second closest 'paragon' – is used in this chapter as a representative of the Mediterranean model.

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