Varieties of Capitalism and European Monetary Integration : What Lessons for the Western Balkan Countries ?

Xavier GALIEGUE
Laboratoire d'Economie d'Orléans, UMR 7322
Collegium de Droit Economie Gestion
Université d'Orléans
Rue de Blois BP 26739
45067 Orléans Cedex2
+33238494981 Fax +33238417380
xavier.galiegue@univ-orleans.fr

ABSTRACT

As an unified monetary space, European Union has the unique characteristics of gathering countries with different market economy models, which show equivalent performances despite their institutional differences. According to the approach of the "diversities of capitalism" of Hall and Soskice (2001) and Amable (2003), these economies can be ranked in four categories, liberal, social-democratic, continental Europe and Mediterranean market economy models. The integration of Central and Eastern Europe Countries (CEEC) doesn't question this clustering, although the last both (Continental and Mediterranean) models has been weakened by the general move towards more liberalized economies. Although the newcomers in UE adopted generally a mix of the characteristics of each of theses models, they can anyway be classified in the category of Continental and Mediterranean models. While these countries still present large disparities in their relative performances, they are on the way of a catch up process that is also implemented by non UE members East countries – including West Balkan countries. West Balkan countries should find their own way in designing their market economy model, in developing institutional complementarities between market organization and implementing their own corporate governance model.

KEYWORDS: Economics of innovation, Economics of knowledge, Technological Diffusion, Convergence and catch-up process.

Code JEL: O140 O47

Over the last thirty years, European Union has been confronted to a double challenge. On one hand the Union had to challenge the others most advanced economies, USA and Japan, on the economic frontier of knowledge and innovation. On the other hand it had to integrate in the same time a wider range of newcomers, at first from Southern Europe, and after from Central and Oriental Europe, with a lot of economic, social, and political disparities. This challenge has been moreover sharpened by the fact that European economic space was composed of countries with countries of very different social, political and economic backgrounds. At a first glance this political challenge has been solved by creating a unified market for goods and in promoting liberal policies, which in a way contribute to criticisms against its political project. But this liberalization of European Economies didn't entail their variety, especially in the working of their factors markets (labour and capital).

European Union has still the unique property of gathering a great number of countries characterized by various organization models, which differs from the homogeneity of the American and Japanese Economies. These characteristics have been largely documented by the approach of the "varieties of capitalism" (Hall and Soskice, 200&), from the early book of M. Albert to the synthethis of B. Amable (2003), which proved that despite increasing integration European countries continued over the last twenty years to present very different differences over a large range of indicators. According to this approach, European countries can be clustered into four models, the liberal (or anglo-saxon), social democrat, continental Europe and Mediterranean models that differ in their market organization and institutional complementarities.

The aim of this paper is to address on one hand the question of the resilience of this European model to the integration of Central and Oriental Europe, and on another the question of the specificity of the model of newcomers in the European Union. These countries, as catch up countries, gave up a state-owned economy to adopt a free market economy, but show specificities that are far from the anglosaxon model that was often given as an example. Do they create a specific model, or should they be deemed to integrate the model of more advanced countries? It is generally accepted that these countries adopt a mix of Continental European and Mediterranean economy models.

One of the problem that meet these countries during their transition was that they adopted free market institution without creating institutional complementarities, creating distorsions in the resources allocation and massive wealth transfers thanks to the rents created by their liberalization. The third object of this paper will be to discuss of the lessons that could be drawn from this experience to the Western Balkanic countries on their way to economic integration. This question is worthwhile as these countries experienced some varieties of state-owned economy, which will help them to find their way to their economic integration.

In order to address these questions, we will in a first point detail the approach of diversity of capitalism, then we will point out some stylized facts concerning this approach, and after we will discuss of the PECO integration during the last years. At last we will discuss of the lessons West Balkan countries can learn from this historical experience.

I The approach of varieties of Capitalism: A reminder

The approach of variety of capitalism takes its roots in the book of Michel Albert, *Capitalisme contre capitalisme* (1991), which opposed two models of capitalism, the "Rhenan Capitalism", and the "Anglosaxon capitalism". Some farther sources of this approach can be found in the comparative approach of A. Shonfield, which detailed the institutional, economic and social differences in each national advanced economy. But the main interest of the Albert approach was to create a simple typology, which helps to understand the difference in the economic organisation of advanced economies. While the first (e.g. the Rhenan model) is ruled by collective negociation on the labour market and a corporate governance linking the different stakeholders of companies (union, shareholders, banks and financial intermediate), the second is more deeply grounded on market mechanisms, with decentralized negociations for workers and a corporate governance controlled by shareholders and the financial market. The main idea of Albert was to explain that these two models didn't converge over time, mainly because each of them exhibits equivalent economic performance. Or in another words, it means that both models can reach the same level of performance without confirming the superiority of another on another, and that the anglo-saxon model was not the ultimate reference of an efficient market economy.

The seminal idea of M. Albert knew an academic revival in 2001, when Hall and Soskice (2001) linked this dichotomy to the notion of "varieties of capitalism": then the Rhenan Capitalism became Coordinated Market Economy (CME), while Anglo Saxon Capitalism became "Liberal Market Economy" (LME). Hall and Soskice created furthermore a third category, as "Mixed Market Economies", which shared some of the characteristics of both first categories, and that includes most of the continental European

economies. As one can check on the following table, while all northern Europe countries (including Germany) belong to the CME category, France and the South Europe countries belong to the MME category.

Table 1: Country division

LMEs	CMEs	MMEs
Australia	Austria	France
Canada	Belgium	Greece
Ireland	Denmark	Italy
New Zealand	Finland	Portugal
United Kingdom	Germany	Spain
United States	Iceland	Turkey
	Japan	
	Netherlands	
	Norway	
	Sweden	
	Switzerland	

Source: Hall and Soskice (2001)

As said before, this approach lies mainly on the comparison of the working of factor markets, mainly on Labour and Capital markets, which reveals important differences in the firm organization and in their corporate governance. More important, it emphasizes the institutional complementarities that link the working of these different markets. A further step in this approach has been made by the works of B. Amable, (B. Amable, 2005, 2011). His basic idea was to test the robustness of the variety of capitalism typology by using a statistical data analysis (a principal component analysis) over 24 variables on 21 countries, on data concerning 5 institutional fields, e.g.:

- Competition on Product market
- Labour market institutions and wage determination
- Financial intermediation and corporate governance
- Social protection
- Education system

Principal Component Analysis permits to define an automatic classification of countries that gathers countries with the same characteristics over these 24 variables.
This new analysis leads to a more refined typology, with no more than 5 different kinds of market economies:

- Liberal (or anglo-saxon) economies (USA, UK, New Zealand, Ireland),
- Continental European Model (France, Germany)
- Mediterranean Model (Portugal, Spain, Greece)
- Social Democrat model (Scandinavian Countries, Nederland)
- Asian Model (Japan, Korea).

While the first model suits with the LME Economy, the following two suits with MME Economies and the last two suit a bit more with a CME economy.

Complementarities between these variables can help to explain the different group of countries created by data analysis. For example in the anglo-saxon economies (for liberal market economies), high competition on product market requires a high flexibility of company management and a high capital mobilization capacity on financial markets. This market provides to economic agents a wide range of tools in order to diversify theirs assets and limit the consequences of risk and of the weakness of Social protection. On the contrary in the Social Democrat model (Sweden, Finland, Danemark) while enterprises are also submitted to a fierce competition, they adapt their strategy by different mechanisms, grounded on a high labour flexibility, a strong social protection and an active education and training policy that allows a constant adaptation to the permanent technological change (flexsecurity). Firms are also provided with stable financial resources that help them to avoid the pressure of financial markets. The continental (France, Germany) and mediterraneean European models (Spain, Portugal, Greece, Italia) differ on all these criteria, mainly on the level of competition on market products, and on labour and social protection.

One of the main questions raised by this approach has been that of the adaptation of the European continental model to globalization and the enlargement of European Union: both phenomena entail an

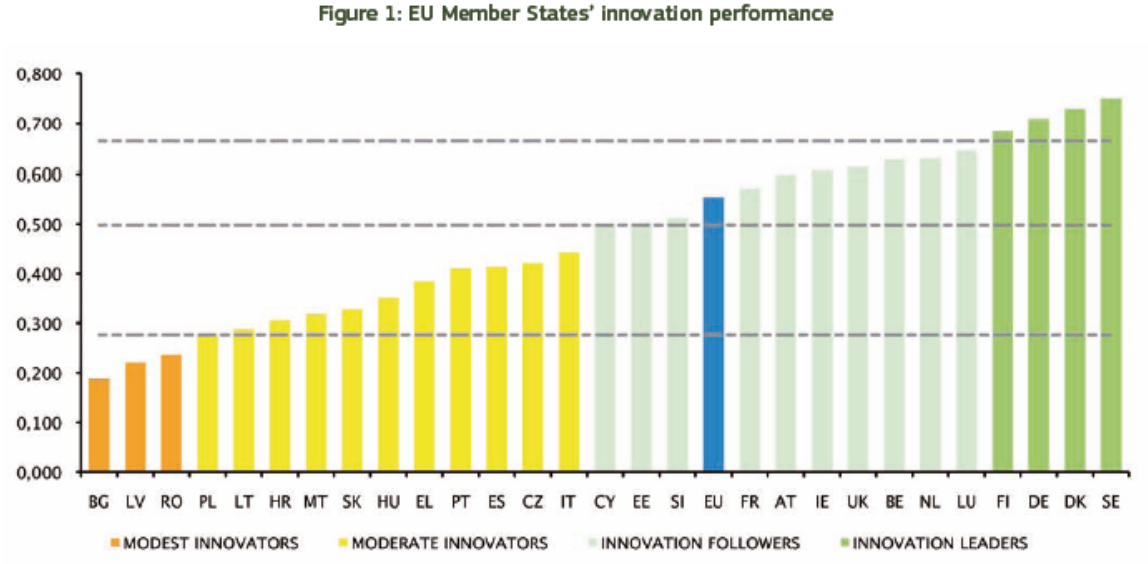
increase of competition on the product markets and a rising pressure for the liberalization of their labour and financial markets. This change can be in contradiction with the systems of social protection and their labour market organization. These systems are therefore weakened: their cost is increasing, while they loose a lot of their efficiency. But the answer to this threteaning could not been found in the adoption of the anglosaxon model: on the contrary, the experience of Scandinavian countries learn that this answer can be found in strengthening social protection, workforce training, and in a massive investment in the education system.

Since the publications of the books of Hall and Soskice (2001), and Amable (2003, 2005), the robustness of this approach has been tested and discussed in a FP7 project, the ICATSEM (for Institutional Changes and trajectories of socio-economic models), which ends in 2012. Its aim was to study both evolution of the european models and of the effect of European enlargement on these model. We will detail further its results.

II Some Stylized Facts on Varieties of Capitalism

One of the main discussions related to the variety of capitalism approach is linked to the compared performances of each market economy model. Most papers converge on the fact that the economic performance of each model didn't present a lot of differences between countries, except for Mediterraean countries. On the contrary on a lot of criteria, continental European economies and social democrat economies present high level performances, which in some case can exceed the performance of anglo-saxon countries. The most prominent proof of this assertion can be found in the comparison of the R&D intensity of each economy, or on their innovative performance according to the Innovation survey European survey. The Innovation European Survey ranks the European Countries in four categories, "innovation leaders", "Innovation followers", "moderate Innovators" and 'modest Innovators" shows social democrats economies are heading this survey.

Figure 1: EU Member States' innovation performance



Worldwide comparison of Innovation performance is not easy to realize, as the European Union performance aggregate very disparate results. South Korea, which belongs to the model of Asian Economy, obtained the top result, a Coordinated Market Economy, gets the best results, ahead USA and Japan. More generally, these international comparisons show the emergence of Asian countries, which belong to the category of Coordinated Market Economies, and catch up the innovative performance of the most advanced countries in a very quick and impressive way.

Figure 25: Global innovation performance

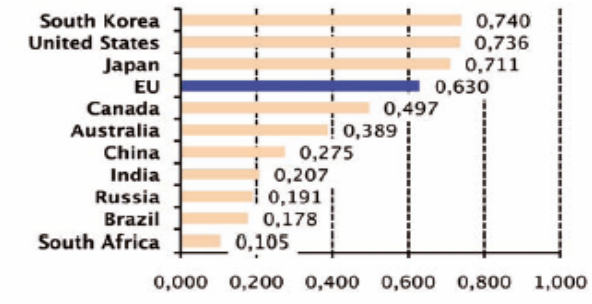
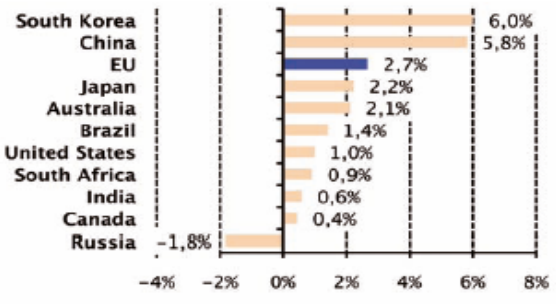


Figure 26: Global innovation growth rates



More detailed results has been found using the comparison of R&D intensity (the ratio of R&D to GDP), they confirm these results, as the following figures proved.: Social democratic and continental Europe economies shows on average higher R&D intensities than the liberal economies.

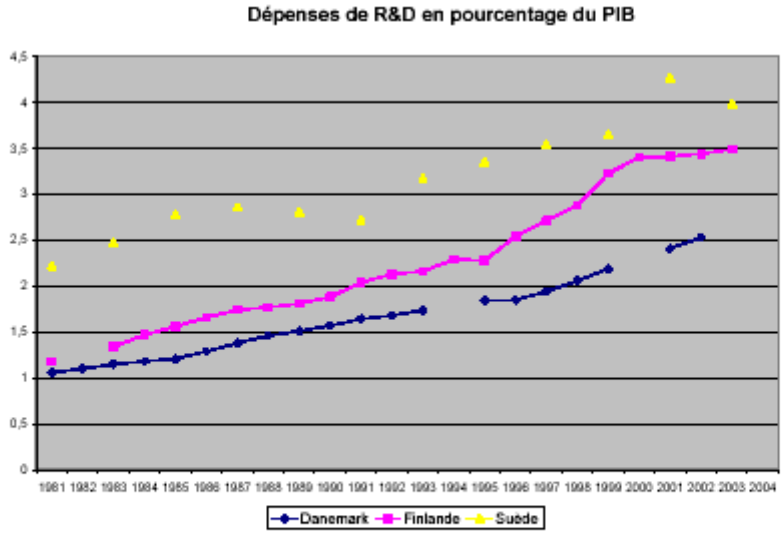
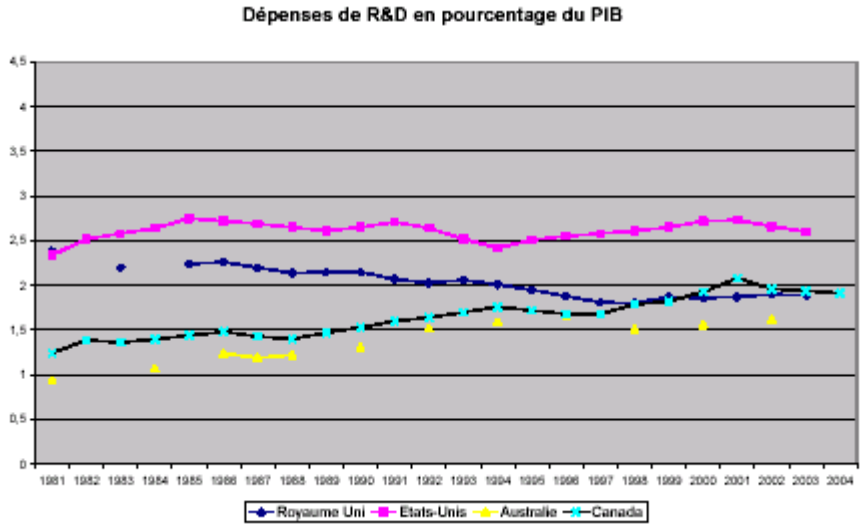


Figure 4. Dépenses de R&D en pourcentage du PIB, pays du modèle social-démocrate. Source des données : OCDE.



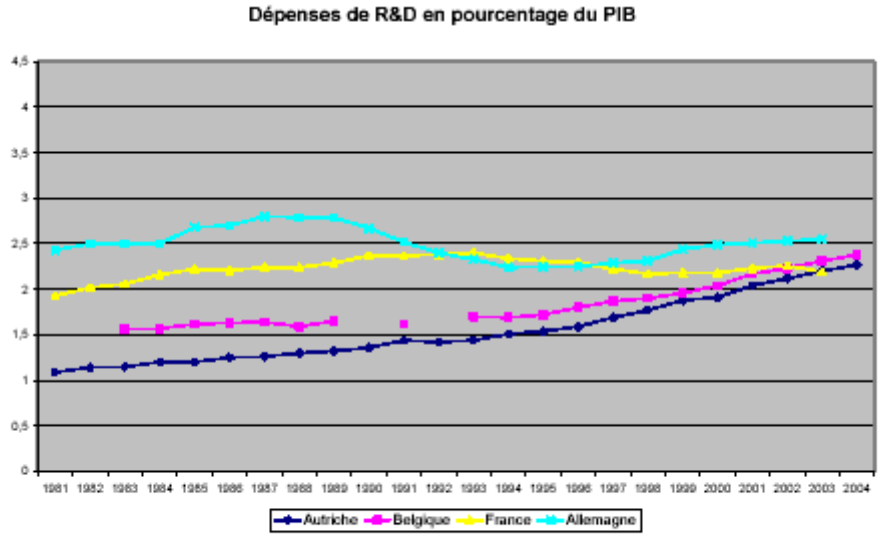


Figure 5. Dépenses de R&D en pourcentage du PIB, pays du modèle continental européen. Source des données : OCDE.

This result has been confirmed by an original study (Akkermans , Castaldi et Los, 2006) which tried to determinate whether the liberal market economies innovate "more radically" than the coordinated market economies. Using patent data, they measured over 20 sectors the origin country of patents ranked over three indicators of the radical character of patents: a first criterion is the number of "measure of citation received" (NCIT), a second is a measure of generality (GEN) and a third a "measure of originality" (ORI)). Then they determine whether Liberal Market Economies (L) or coordinated market economies (C) head this ranking. One can check that results are mixed, according to different activity sectors. : while LME countries dominate the CME countries on the Originality criterion (27 Sectors on 29), results are quite different on the Generality of patents (equality for both categories) and on the Number of citation index (14 for CME and 9 for LME). So it is quiet difficult to give a clear-cut result from this study, depending on activity sectors each category of economy can innovate more radically than the other.

Table 6: Differences in Radicality between LMEs and CMEs (by Industry)

		NCIT	GEN	ORI			NCIT	GEN	ORI
1	Food	L***		L***	22	Special industry mach.	C***		L***
2	Textiles		L**	L***	23	General industrial mach.	C***	C**	L***
3	Inorg. chemistry			L***	24	Refrigeration mach.			
4	Org. chemistry	L***	L***	L***	25	Misc. non-elec. mach.	C***		
5	Plastics			L***	26	Elect. transmiss. mach.			L***
6	Agr. chemicals	L***	L***	L***	27	Electrical industrial app.	C***		L***
7	Soaps	L***			28	Household appliances		L***	L***
8	Paints			L***	29	Electrical lighting	C***		
9	Misc. chemicals		C**		30	Misc. elect. machinery	L***	L***	L**
10	Drugs	L***	L***	L***	31	Radios and TVs		L***	L***
11	Oil and gas		C***		32	Electr. components	C**	L***	L***
12	Rubber			L***	33	Motor vehicles	C***	C***	
13	Stone and glass		C*	L***	34	Missiles			
14	Primary ferrous prod.				35	Ships and boats			
15	Non-ferrous metals	L**		L***	36	Railroad equipment			
16	Fabr. metal prod.	C**	C***		37	Cycles and motors	C***	C***	C*
17	Engines	C***		L***	38	Misc. transport equipm.	C***	C***	
18	Farm machinery		C***	C***	39	Ordinance	L***	L***	L***
19	Construction mach.		C***		40	Aircraft	C***	C**	L***
20	Metal working mach.	C***		L***	41	Instruments	C*	L***	L***
21	Office mach.	L***	L***	L***	42	Miscellaneous			L***

Blank cells indicate no significant difference in radicality between LMEs and CMEs. *: significant at 10%, **: significant at 5%, ***: significant at 1%.

Source : Akkermans, Castaldi, Los, 2006

Others results has been obtained using model studying the link between this approach and the proximity of economies with the technological frontier. More precisely, each system differs by their production factor market organization, which is linked to their level of product market regulation. Papers proved in this field that the proximity of this technological frontier was not linked with the level of liberalization of the product market. (Amable, Ledezma, Robin (2014), Amable, Demmou, Ledezma (2010). The main reason underlying this result is linked to the controversial effect of Competition over Innovation: in some case a high market power can improve innovation, while in another the converse is true, competition may also encourage innovation.

III Did Central and Eastern Europe Countries Economies create a new model?

Since the first papers and books in this field, which were written in the early 2000s, attempts have been made in order to study the evolution of European varieties of capitalism, and on the resilience of these variety towards the arrival of newcomer over this period.

A first paper (Berrou and Carrinzaux, 2005) studied the characteristics of 3 newcomers (Czech Republic, Poland, Hungary) and of Turkey using the same data analysis. Not surprisingly, they found the first three could be affiliated to the Continental Model, despite the weakness of their financial markets and of their education system, and welfare state, while the third will belong to the mediterranean group. Some differences appeared between these countries, especially concerning the intensity of market product competition, higher in Hungary than in the other member of the group. By this time the authors question the opportunity to create a new group including this transition economies (see following table), but as available data were concerning the period of the immediate accession of this countries to European Union, it was worthwhile that this category will be rather unstable and would adopt other models during this integration.

This point has been further documented in the framework of the FP7 ICATSEM project (for Institutional Change and Trajectories of Socio-Economic Models, ICATSEM, 2012), which has been made later and takes account of the effect of European integration on the Central and Oriental countries. The idea was to retrieve the Amable Data Analysis over a panel of 16 european countries, using 91 variables on 16 Europeans countries, including 4 newcomers (Czech Republic, Hungary, Poland and Slovak Republic) over 3 base years (2000,2004,2008). The main results obtained by the FP7 project have been to prove that two evolutions have appeared over the first 10 year of the 2000'.

Tableau 3 Institutional Characteristics of the different form of Capitalism

Les formes de capitalismes	Marché des produits	Marché du travail	Systèmes financiers	Protection sociale	Education
Modèle européen continental	Réglementation des activités entrepreneuriales	Politique de l'emploi très active	Intermédiation bancaire	Système public de protection sociale relativement développé, notamment dans le domaine de la santé	Système éducatif public légèrement orienté vers le secondaire et aux "performances" moyennes
Modèle méditerranéen	Concurrence extrêmement réglementée notamment au niveau de l'activité entrepreneuriale	Marché du travail protégé par une législation très stricte	Marchés financiers peu développée	Protection sociale limitée	Système éducatif orienté vers le secondaire et peu "performant"
Modèle social-démocrate	Marché des produits assez déréglementés avec notamment de faibles charges administratives pour les entreprises	Intervention publique et présence syndicale forte	Intermédiation bancaire	Système public de protection sociale très développé	Système éducatif public très "performant"
Modèle libéral de marché	Concurrence libre et non réglementée	Marché du travail extrêmement flexible	Système financier de marché	Protection sociale très peu développée	Système éducatif tertiaire privé
Modèle asiatique	Existence de charges administratives limitant l'activité entrepreneuriale	Réglementation existante mais libertés syndicales limitées	Economie d'endettement	Protection sociale peu développée	Système éducatif tertiaire privé
Modèle d'Europe centrale et de l'est ?	Intervention publique forte et protection vis-à-vis de la concurrence extérieure	Marché du travail assez flexible	Système financier atypique et marchés financiers très peu développés	Protection sociale faible	Système éducatif peu "développé"

Source: Berrou and Carrinzeaux, 2005.

First, undoubtedly European markets evolved over this period toward a more liberalized organization, whatever their model (excepting some Mediterranean countries, mainly Greece). This liberalization concerned not only labour and financial markets, but also the product market, the main example being that of Germany. But in the meantime, social protection systems have been reinforced, and welfare state systems keep on improving. This double evolution doesn't question the partition of countries between these categories, but in a way they mean that Continental European and Mediterranean economies have ben weakened during this period. Put in another words, that means European Economies are now converging to two opposite types, Liberal Economies on one side, and Social Democrat economies on the other, that appears as two stable poles in the typology of market economy models. On the contrary Mediterrannean and Continental Economies know dramatic changes over the last years. We can check on the following table that the change in statistical distance between model concerns first of all the Mediterannean model, which became closer to The European Continental and Social Democratic models, while the Continental model become itself closer to the liberal model. It means that the Continental model lost a part of its specificities and of its coherence, because of the arrival of newcomers of different characteristics, and because of the weakening of their labour and financial markets specificities. Central and Oriental Europe Countries shows more and more characteristics of Liberal Economies, even if the

working of their financial market is far from that of an anglo-saxon economy. On the other hand, mediterranean countries (except Greece) evolved towards the continental Europe model.

Table 4

Relative change in statistical distances (2000-2008)				
	Continental	**Liberal**	**Social Democratic**	**Mediterranean**
Continental	0%	-16%	-6%	-38%
Liberal	-16%	0%	-17%	-14%
Social Democratic	-6%	-17%	0%	-22%
Mediterranean	-38%	-14%	-22%	0%

Source: Berrou and Carrinzeaux, 2005.

According to the paper of Berrou and Carrincazeaux (2005), Central and Oriental Europe countries, newcomers in the Europeans Union, suits quiet well with this typology. Globaly they still belong to the european continental model, with some characteristics of the anglosaxon and mediterannean models. This situation should not be permanent: it means that these countries won't be a part of a new model and that they will adopt one of the models of the leading European countries.

The main difficulty that encounter Central and Eastern Europe countries during their transition are linked to the asymmetry of market liberalization: CEEC experience learns that if it has been easy to liberalize all markets (Labour, Financial, Goods), it has been far more difficult to improve effectively competition on these new markets. While competition rises sharply on labour market, it hasn't be the case on good and capital markets. As Financial market won't have the same maturity and openness of the other markets, it could lead to a rise of inequality and corruption, and by the end to a misallocation of resources. In a way the affiliation of these countries to the Continental Europe model is a bit far-fetched, as these countries doesn't present the same complementarities in the working of their different markets and institutions. Creating institutional complementarities would help these countries to improve their overall performance, mainly by adopting a specific corporate governance model. From this point of view Balkan countries have a chance to develop their own model, thanks to their former historical experience.

IV European Integration and Economic performance of newcomers

As catch up countries, is it quiet evident that CEEC Countries doesn't present the same performance than the economies of more advanced economies, especially in the field of Innovation. As we saw on the European Innovation Scoreboard, Central and Oriental countries belong to the category of" modest innovators", with very low R&D intensity (below 1% of GDP). Another study on the South, Central and Eastern Europe proves that the investment in the knowledge industries is weaker than in Western Europe, even when the sectoral structure of these countries is taken into account. (J. Meriküll, R. Eamets, U. Varblane, (2009).

A few studies have been made in this field on other eastern countries. The most prominent study has been made by R. Veugelers (2010). Using a large panel data over 24 countries from Central and Eastern Europe, the Caucasus and Central Asia (CEECCA) countries, including Balkan countries, this study tried to test their ability to develop a knowledge based growth path or to have the potential to develop it in the near future. More precisely, this study clustered the CEECCA Countries according to their ability to "buy", or to "make" new technologies: it can be checked that Balkan countries mostly belong to the bottom category of "Innovation weak" countries, except Croatia which belongs to the category of "Innovation active" economies. It is important to point out that newcomers in the UE belongs already to the latter category, except Bulgaria and Romania, which for a lot of point of view have the same characteristics than the Western Balkan countries.

Table 5 Ranking of the CEECCA Countries by Innovation Activities

				GDPpc2003	GDPpc 2007
Innovation Weak	I1	Little BUY- No MAKE	Tajikistan, Kyrgyzstan, Serbia, Bosnia, Macedonia	20.7	21.6
	I2	Some BUY- No MAKE	Azerbaijan, Mongolia, Moldova, Kazakhstan, Romania, Armenia, Bulgaria	22.7	27.4
Innovation Active	I3	Mostly BUY- Little MAKE	Latvia, Poland	53.6	62.1
	I4	BUY-MAKE	Slovakia, Lithuania, Hungary, Estonia, Turkey, Croatia, Ukraine, Russia	53.2	58.6
	I5	BUY- MORE MAKE	Slovenia, Czech Republic	92.2	94.5

Note: GDPpc is expressed as gap relative to maximum GDPpc in the CEECCA group, ie Slovenia. Values are sub-group unweighted averages.

Source: R. Veugelers, Assessing the potential for knowledge-based development in transition countries, Bruegel Working Paper 2010/01

From this point of view the integration to the European Union could help the western Balkan countries to adopt a kind of hybrid economic model. The following table summarize the main shortcomings that affect these countries. It details the main characteristics of advanced (USA, UE, Japan), emergent countries (India, Brasil, China) and of the CEECCA countries, in the field of
Financial market sophistication,
Labour and good market efficiency,
Market size and intensity of competition,
Proclivity of trade
Prevalence of FDI, and
Day to start Business.

All of these countries shows low scores on each of these criteria, its lowest concerns the "Market size", then the "labour and goods market efficiencies" and "proclivity to trade". It is important to point out that the size of market shows also the highest standard deviation with "proclivity to trade" and "Day to start business". On the contrary, the indicators of "Prevalence of FDI" and of "Day to start business" are quiet high, higher for the first than that of Brasil and China, and than of all other emergent economies. Even if these results aggregate very different countries performance, they show that European Integration will give an insightful leverage in order to improve their performance. Balkan countries, tough not isolated in this study, share undoubtedly these characteristics, mainly because of their isolation and space fragmentation, and will take a considerable advantage from this integration.

Table 6 Markets prerequisite for knowledge-based growth: Internationally benchmarking CEECCA

	US	Jap	Bra	CN	India	EU15	CEECCA	*CEE CCA Sd*	*CEE CCA-gap*
Financial market sophistication	5.61	4.75	4.36	3.64	4.98	5.19	4.13	*0.47*	*0.74*
Labour market efficiency	5.79	5.09	4.15	4.49	4.16	4.51	4.44	*0.30*	*0.77*
Goods market efficiency	5.32	5.13	3.90	4.48	4.52	5.01	4.09	*0.39*	*0.77*
Market size	6.91	6.15	5.54	6.58	5.96	4.93	3.54	*0.96*	*0.51*
Intensity of Local Competition	6.10	5.90	5.30	5.60	5.90	5.69	4.77	*0.63*	*0.78*
Proclivity to trade	5.68	5.78	3.96	4.82	3.76	5.73	4.37	*0.89*	*0.76*
Prevalence of FDI	5.4	4.7	4.6	4.4	5.2	5.75	4.82	*0.76*	*0.84*
Days-to-start-business	6.88	5.81	1.00	5.06	5.19	6.21	5.65	*0.84*	*0.82*

Source: Veugelers, 2010.

First of all, as the perspective of European Union integration will become closer, the arrival of FDI will increase with time, and will exerts spillover on the whole economies. The future integration to the European union market will furthermore increase the size of the market of these economies unions. Lastly, the proclivity of trade and Day to Start Business will help these countries to boost their growth. On the contrary, it should be important to design the both liberalizations of their goods and labour market in order to create fruitful complementarities.

CONCLUSION

The integration of CEEC countries to European Union experience will help the West Balkan countries to build up a strategy, which will be landed on their own experience and characteristics. This integration will increase FDI investment and flow trade, which will offset their small market size and their isolation. But they should also adopt their own model of market economy and corporate governance, without copying one or another. In a way they should choose between the two opposite European model (liberal or social-democrat),, even if in a first step they will probably be affiliated to a mix of both, as Mediterranean and Continental Europe models.

Sources

Dirk Akkermans, Carolina Castaldi and Bart Los (2007), « Do 'Liberal Market Economies' Really Innovate More Radically than 'Coordinated Market Economies'? Hall & Soskice Reconsidered », Groningen Growth and Development Centre, University of Groningen and Utrecht University, March 2007.

Albert M. (1991), *Capitalisme contre capitalisme*, Le Seuil, 1991

Amable B. (2003) , *The diversity of modern capitalism*, Oxford University Press, Version française: *les Cinq Capitalismes, Diversité des systèmes économiques et sociaux dans la mondialisation*, LeSeuil , 2005.

Amable B., L. Demmou and I. Ledezma [2010] "Product Market Regulation, Innovation and Distance to Frontier", *Industrial and Corporate Change*, Vol. 19, N°1, pp. 117-159.

Amable B., I. Lezdema, S. Robin (2014), Product market regulation, Innovation and Productivity, Document de travail, 2014-25, Centre d'Economie de la Sorbonne, March 2014.

Berrou JP et Carrinzaux C. (2005) , La diversité des capitalismes et les pays d'Europe Centrale et orientale-une analyse statistique, Cahiers du GRES, 2005-18

Hall P.A. et D. Soskice (2001),*Varieties of capitalism, the institutional foundations of comparative advantage*, Oxford University Press

ICATSEM (2012), Institutional Change and Trajectories of Socio-Economic Models, FP7-SSH-2007-1, *The future of socioeconomic models in Europe*- Final report, July 2012.

Meriküll, R. Eamets, U. Varblane (2009), Sectoral system of Innovation : the Central and Eastern European Perpective, UNU Merit Working Paper, 2009.

Marzinotto B (2011), EU Economic Governance and Varieties of Capitalism, in S. Van Genugten and E. Jones (eds), *Europe Today,* 4th Edition, Rowman and Littelfield, NY.

Shonfield A, (1972), *Le capitalisme d'aujourd'hui*, Gallimard, 1972

R. Veugelers, Assessing the potential for knowledge-based development in transition countries, Bruegel Working Paper 2010/01 http://www.bruegel.org/publications/ show/category/working-papers.

Annexe 1 Typology of European Economic Models: Characteristics and complementarities

Source: ICATSEM report, 2012.

Table 4-1: Mediterranean model – Characteristics (Year 2000 – 10% threshold) Spain, Greece, Italy, Portugal, *Czech Republic, Hungary, Poland, Slovak Republic*		
–		+
Licenses and permits system	*Strongly regulated product markets*	Administrative burdens for corporation Administrative burdens for sole proprietor firms Sector specific administrative burdens Barrier to entry in network sectors Explicit barriers to trade and investment Barriers to FDI Scope of public enterprise sector Direct control over business enterprise Involvement in business operation State control Product market regulation
Flexible hours regulation Long term unemployment benefits Trade Union density	*High employment protection, very few active labour market policies, job stability*	Notice and severance pay for no-fault individual dismissal Right to strike in government sector Restrictions on the use of fixed-term contracts Restrictions on the use of temporary workers Unemployment rate Average job tenure
Bank bonds (% end year balance sheet) Flexible credit market regulation International debt issues Merger activity Private bond market capitalization to GDP Share of private credit to households Venture Capital - Total (% GDP) Venture Capital - High Tech (% GDP)	*Low sophistication of financial markets, static, long term relationships*	Bank capital and reserves (% end year balance sheet) Concentrated ownership
Share of family-related expenditure in TGE and GDP Share of incapacity-related benefits in TGE and GDP Share of expenditure on LMP in TGE and GDP	*Basic level of social protection*	Share of old age benefits in TGE and GDP
Public expenditure on education as % of GDP – tertiary Public expenditure on education as % of GDP – all levels Annual expenditure per student – tertiary level Employment rate among the 25-64 with ISCED 34 and 56 Share of labour force with tertiary education Share of population with tertiary education Vocational enrolment in secondary level Expected years of education Gross enrolment rate in all levels, esp. secondary level Average PISA score in mathematics and sciences	*Primary-oriented educational system, short term education, weak vocational training, poor participation*	Expenditure ratio secondary to tertiary Annual expenditure per student – primary level Share of labour force with primary education Share of tertiary graduates in social sciences and business

Table 4-2: Mediterranean model - Complementarities (Year 2000)					
	Product markets	*Labour markets*	*Financial Systems*	*Social protection*	*Educational Systems*
Product markets		A weakly competitive environment permits job stability	A weakly competitive environment permits long-term relationships between banks and industries		
Labour markets	Strong employment protection induces inertia for companies		Strong employment protection does not call for diversity of risk protection	Stability of employment reduces the need for social protection	Stability of employment reduces the sought of improved competences
Financial Systems	A low sophistication of financial products hinders the dynamics of product markets	Inter-temporal risk-smoothing allows stable employment			
Social protection					Poor social protection means that specific skills are less worth investing in
Educational Systems	A low level of competences implies low level of specialization	A low level of competences means unskilled workers		A low level of competences requires less protection	

Table 4-3: Continental model - Characteristic Variables (Year 2000 – 10% threshold) Austria, Belgium, Germany, France, Netherlands		
–		+
Flexible hours regulations Right to strike in the government sector	*Regulated markets, centralized level of wage bargaining, active labour market policies.*	Procedural inconveniences on regular dismissal Public expenditure on active LMP (Job creation) Public expenditure on active LMP (Unemployment)
Bank capital and reserves (% end year balance sheet) Number of listed companies Investors' protection	*Universal banking system.*	Bank bonds (% end year balance sheet) Bank securities (% end year balance sheet) International debt issues
	High level of social protection, taxation system.	Tax revenues from social security – % GDP Tax revenues from social security – % taxation Share of survivors' benefits in TGE and GDP Share of health expenditure in GDP Share of total social public expenditure in TGE and GDP Employees' contribution to tax revenues - % GDP and % taxation
Expenditure ratio primary to secondary Employment rate among the 25-64 with ISCED 012	*Vocational enrolment and focus on higher education and specialisation*	Share of private expenditure on secondary education Vocational enrolment in secondary level Average PISA score in mathematics

Table 4-4: Continental model - Complementarities (Year 2000)					
	Product markets	*Labour markets*	*Financial Systems*	*Social protection*	*Educational Systems*
Product markets		average competitive markets = rigid labour policies combined with incentives	average competitive markets = traditional financing of firms by banks	average competitive markets = redistribution on workers' protection	Competition = need for high skilled workers
Labour markets	employment protection hinders dynamics of products markets		employment protection = long term perspective (no need for short term financial products)	centralised bargaining system = redistributive scheme	active LMP, centralized system = incentives for higher skills level
Financial Systems	Financing by both banks and market			Traditional banking activities affects protection against risks = need for social protection	Traditional banking activities permits private access to higher education
Social protection	High level of social protection based on a taxation system	High level of social protection linked to employment	High level of social protection lowers the need for financial products		High level of social protection facilitates longer duration of studies
Educational Systems	Higher education, vocational = specialisation on product markets	Higher education, vocational = high skilled workers	Relative importance of private funding = need for credit		Poor employment of low skilled workers = need for social protection

Table 4-6: Social Democratic model – Complementarities (Year 2000)					
	Product markets	*Labour markets*	*Financial Systems*	*Social protection*	*Educational Systems*
Product markets		Competition requires flexibility of the labour force Absence of state implication on the product markets side transfers on the labour market side.	Moderate competition = little need for short term products albeit dynamic financial places	Workers' protection is required in the presence of competitive product markets	Competition requires a skilled workforce
Labour markets	Strong unionization induces firms' coordination.		Flexibility requires social protection, state involvement translate in little taxation levels		Flexibility calls for constant formation and high skilled workers
Financial Systems	Financing either on a short term and long term view?				
Social protection		High level of social protection permits flexible employment	High level of public social protection lowers the demand for private protection		High level of social protection allows for long-term studies
Educational Systems		Highly educated labour force			

Table 4-7: Liberal model - Characteristic Variables (Year 2000 – 10% threshold) Switzerland, UK, Ireland		
–		+
Communication and simplification of rules and procedures Sector specific administrative burdens Barriers to entry in services Barriers to FDI Scope of public enterprise sector Direct control over business enterprise Product market regulation State control	*Highly flexible product markets*	
Public expenditure on LMP (Total) Public expenditure on active LMP (Training) Procedural inconveniences on regular dismissal Difficulty of dismissal Restrictions on the use of fixed-term contracts Restrictions on the use of temporary workers Short term unemployment benefits Unemployment rates Average job tenure	*Highly flexible and dynamic labour markets*	Individual level of wage bargaining Freedom in hiring and firing decisions Flexible hours regulation
	Very active financial markets, low bank concentration	Financial assets of pension funds (% GDP) Financial assets of investment funds (% GDP) Stock market capitalization to GDP Investors' protection Diffused ownership
Tax revenues from social security – % GDP and % taxation Employer's contribution to tax revenues - % GDP and % taxation Share of old age benefits in TGE and GDP Share of health expenditure in GDP Share of survivors' benefits in GDP Share of expenditure on LMP in GDP Share of total social public expenditure in GDP Ratio public to public and mandatory private social expenditure	*Limited welfare systems*	Share of health expenditure in TGE
Expenditure ratio secondary to tertiary Annual expenditure per student – primary level Gross enrolment rate – tertiary level Share of tertiary graduates in health and welfare	*Strong tertiary orientation, long duration, little specialisation*	Employment rate among the 25-64 with ISCED 56

Table 4-8: Liberal model - Complementarities (Year 2000)					
	Product markets	*Labour markets*	*Financial Systems*	*Social protection*	*Educational Systems*
Product markets		PM flexibility requires LM flexibility	PM flexibility requires short-term products and dynamic financial markets		PM flexibility calls for high skilled workers with a large spectrum of competences and pushes for competitive educational systems.
Labour markets	Individual bargaining facilitates PM flexibility, so do low levels of EP		Flexible labour force (in absence of SP) calls for diverse assets	Flexibility can only afford basic social protection (health)	Flexibility implies higher employment rates of high skilled workers
Financial Systems	Dynamic financial markets associated with short-term profits and need for diversification, and create dynamic product markets. Diffused ownership goes with rapid changes.			High diversification of risks lowers the need for social protection.	
Social protection		Low level of social protection eases flexibility	Low levels of public social protection imply a demand for private protection		
Educational Systems		dynamic insertion on product markets	Importance of private funding (linked to competition), need for financial investments		

Table 4-5: Social Democratic model - Characteristic Variables (Year 2000 – 10% threshold) Denmark, Norway, Sweden, Finland		
–		+
Administrative burdens for corporation Administrative burdens for sole proprietor firms Sector specific administrative burdens Barrier to entry in network sectors Involvement in business operation Administrative burdens on start ups State control	*Little administrative constraints, moderately competitive environment*	
Restriction on the use of temporary workers Existence of a minimum wage	*Strong State implication, strong unionization, no minimum wage and relatively centralized level of wage bargaining.*	Public expenditure on active LMP (Training) Public expenditure on active LMP (Employment incentives) Trade Union Density Long term and short term unemployment benefits
	High degree of bank concentration, relative financial activity combined with traditional banking	Bank concentration Flexible credit market regulation Number of listed companies Merger activity Share of private credit to households
Tax revenues from social security – % taxation Employees' contribution to tax revenues - % GDP and % taxation Share of health expenditure in TGE Share of survivors' benefits in TGE and GDP	*Integral protection system.*	Share of family-related expenditure in TGE and GDP Share of incapacity-related benefits in TGE and GDP Share of expenditure on LMP in TGE and GDP Share of total social public expenditure in GDP Share of unemployment benefits in GDP
Share of private expenditure on secondary education Share of private expenditure on tertiary education Share of labour force with primary education Share of tertiary graduates in social sciences and business	*Publicly funded for all levels of education, importance of health and welfare graduates, strong participation at all levels.*	Expenditure ratio primary to secondary Public expenditure on education as % of GDP – tertiary Public expenditure on education as % of GDP – all levels Employment rate among the 25-64 with ISCED 012 - 34 Share of labour force with tertiary education Gross enrolment rate in all levels, secondary and tertiary Share of tertiary graduates in health and welfare