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THE FRENCH CENTRE FOR RESEARCH
AND STUDIES ON THE WORLD ECONOMY

CONTENTS:

FOCUS

Which Trade Policy for European Competitiveness? The Case of Services

In France, like in most Western European countries, competitiveness of the manufacturing industry is a major concern. These countries lost significant market shares during the last decades, and failed to halt the deindustrialization process which destroyed hundreds of thousands jobs. To resist the competitive pressure from emerging countries, decision makers in old industrialized nations have two types of proposals. On the one hand they suggest offensive action, by singing alternatively the praises of wage moderation and investment in research and development and quality improvement. On the other hand, the economic crisis has exacerbated defensive arguments and protectionist rhetoric is increasingly popular.

The debate on competitiveness, and on the appropriateness of using trade protection measures, is entirely focused on manufacturing industries. The case of services sectors remains in the shadows. This is a bit strange and might be problematic. Indeed, services sectors are undoubtedly an important source of employment in developed countries. Most Western European countries have a clear comparative advantage in the production of tradable services. They would certainly benefit from an offensive promotion of trade liberalization.

Services represent the main part of the global economy. They account for 70% of the world added value and over half of total employment. However, the share of services in total trade is lagging despite having expanded greatly since the 1980s. Indeed, Services account for only 21% of total international trade (World-Trade-Organization, 2010), partly due to the high level of regulatory protection existing in domestic markets for services. In turn, the high level of protectionism in services is partially due to the fact that they have been only recently included in the bilateral as well as multilateral trade agreements. Their inclusion in the Uruguay Round, led to the General Agreement on Trade in Services (GATS) in January 1995. As a result of the growing role of services in world trade, economists have started to pay more attention to this field.

This is not an easy task. The assessment of the gains from liberalization (through simulations based on Computable General Equilibrium modeling) must rely on accurate measure of the level of protection. And measuring the effective level of protection in services can be challenging, both theoretically and empirically.

How to measure trade protection in services?

One problem lies in the specific nature of services compared to goods. Proximity between producer and consumer and the intangible characteristics intrinsic to services produce different impediments to trade in services from those that apply to goods. These impediments include limitations such as quotas, licences, prohibition of some activities for foreigners, and government regulations intended to reduce market access for foreign firms and/or discriminate in favor of domestic firms. Liberalizing trade in services implies changes to national regulation. From a technical and a political economy perspective, reformulating regulations implies much more than simply cutting a tariff. Moreover, data on services trade and actual policies are scarce, mainly for non OECD countries, and transforming qualitative information into a quantitative measure of protection is difficult. Nevertheless, several attempts have been made to quantify barriers to trade in services.

One strand of literature relies on inventory approaches. In a seminal paper Hoekman (1996) uses a methodology based on a frequency index, which assigns a numerical value to the level of restrictions imposed by each country in a given sector, by mode of supply. The country's GATS commitment schedule is used as the main source of information on the barriers imposed by countries, and an arbitrary tariff equivalent is then attributed to the country demonstrating the most protectionist policy. Similarly, Mattoo et al. (2001) have built openness indices for telecommunications and financial services. And, more recently, Gootiiz and Mattoo (2009) have compiled effective policy restrictiveness in the services sector for 32 developing and transition economies, and 24 OECD countries.

A second strand of literature examines the barriers to trade in services relying on a two-stage method. The first stage consists of qualitative assessment of the commitments made by importers under the GATS, or of the barriers imposed on exporters of services by destination markets. In the second stage, the same information is used to explain international differences in price-cost margins of firms within sectors. The Australian Productivity Commission (APC) pioneered the estimation of tariff equivalents using the Trade Restrictiveness Indices (TRI) (Dee, 2005). Relying on a weighting methodology, Dihel and Shepherd (2007) apply the same methodology as the APC. They observe that the non-OECD trade restrictiveness indexes are higher than the OECD indexes. This method is extended in Fontagné and Mitaritonna (2009) and applied to the Distribution and Telecoms sectors in twelve emerging countries (Argentina, Brazil, China, Egypt, India, Indonesia, Malaysia, Morocco, Singapore, Thailand, Philippines and Tunisia).

Beyond official restrictions

These methods are subject to severe limitations. First, collecting information on domestic regulation, the degree of restrictiveness and the coverage for each sector and importer is an immense task. Second, it can be proven that discriminatory measures listed by the GATS are not the only political measures impeding trade in services. Matthieu Crozet, Emmanuel Millet and Daniel Mirza (2012) have shown that technical regulations of services sectors, even when they are non-discriminatory *a priori*, might be discriminatory *de facto*, and contribute to explain the lack of trade in services. Indeed, complying with specific domestic regulations might be more costly for foreign suppliers than for local ones who have a better access to the information and lower red tape costs. Crozet *et al.* (2012) develop a simple strategy to identify the specific impact of regulations on international trade in services, based on the analysis of the two trade margins, i.e. the export decisions and the sales of each exporter in each foreign market. To assess the trade impact of non-discriminatory regulations, they use a dataset giving exhaustive information on the business services traded by each French firm to each foreign country. The econometric results confirm that domestic regulations in the destination country have a negative and statistically significant impact on both the probability that a French firm exports to this country and the value of the export flow. A 10% percent increase in regulations reduces services export values by more than 7%. And the same percent change in regulations reduces the probability of exporting with respect to that of not exporting by 2.8%. According to the theory, this proves that these regulations are discriminatory *de facto*. Furthermore, they show that tightening domestic regulations in a given country increases the relative marginal cost of foreign producers but does not impact significantly the fixed entry cost.

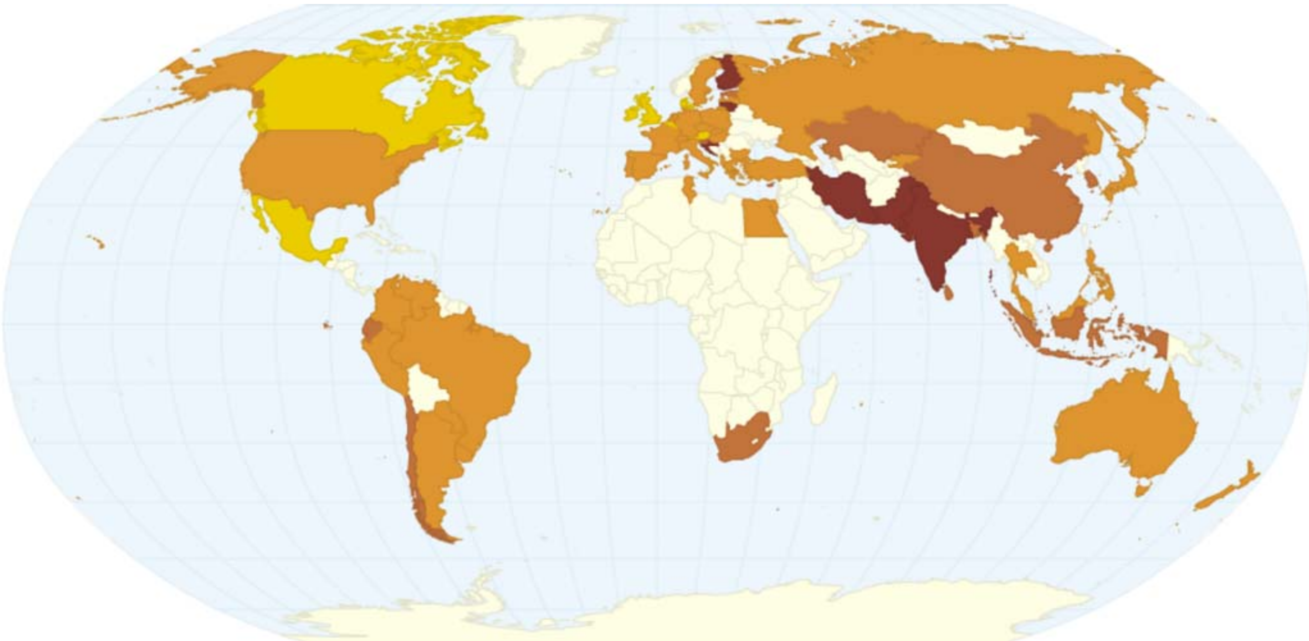
In this context, in order to assess the effective level of trade impediments in services, a very comprehensive approach is certainly appropriate. This approach consists of computing tariff equivalents and revealing protection by comparing real trade in services against a benchmark estimated using an empirical gravity equation. This idea is relatively simple. By estimating a standard trade model on real data, the econometrics can reveal the importance of "missing trade", i.e. the difference between the observed value of bilateral trade and the value predicted by the model under free trade conditions. This is what is proposed by Fontagné et al. (2011). They compute regulation tariff equivalents, focusing on cross border trade in services (Mode 1) and provide evidence on the magnitude of the different estimation biases potentially associated with this method. At the end they provide tariffs equivalents for 9 services sectors and 65 countries based on Global Trade Analysis Project (GTAP) 2004 data (See Figure 1 & 2). Not surprisingly, the results reveal that trade barriers are very high in services, even though the countries with the lowest levels of protection are the developed economies. The most liberalized sector is Transportation with a 26% tariff protection on average. The most protected is Construction, with an average tariff of 75%.

These two papers suggest that there is room for intensive trade negotiations in services, including between OECD countries, and even within the EU. Considering their comparative advantages in services, the promotion of trade liberalization in these sectors may be one of the most promising competitiveness policy they can imagine.

Figure 1 : **Financial Intermediation & Insurance**

Ad Valorem Equivalent

(in %)

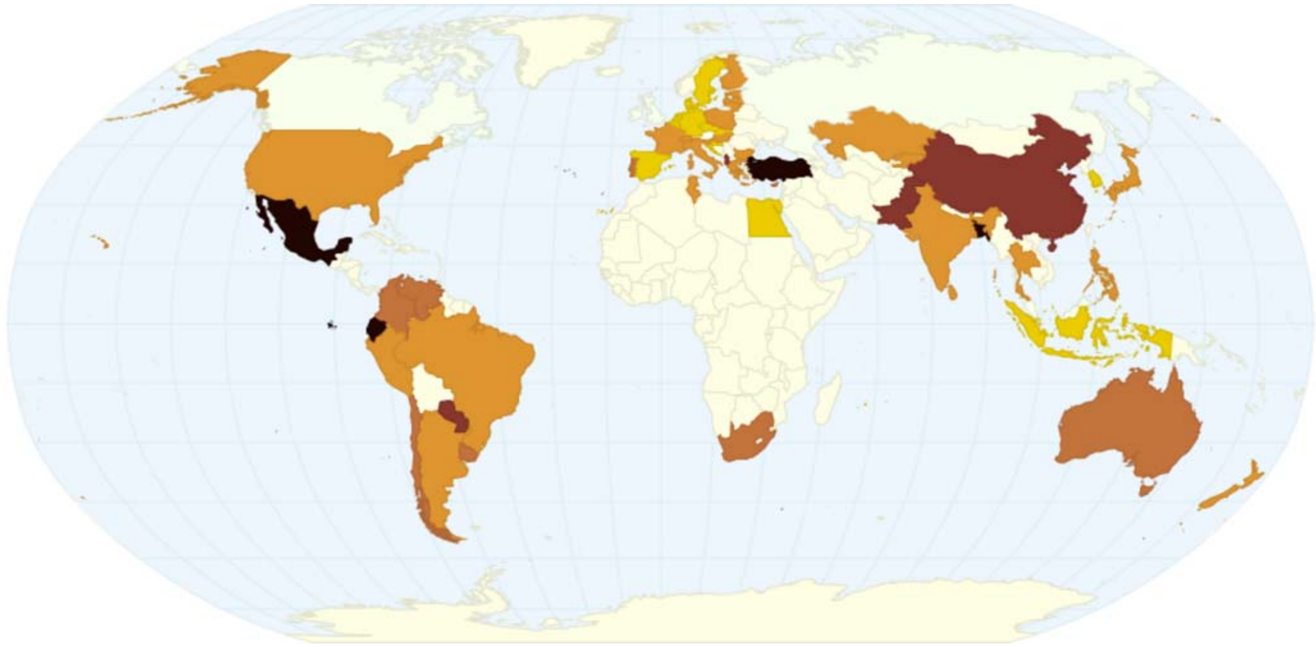


Source: Fontagné, L., Guillin, A. & Mitaritonna, C. (2011). ChartsBin.com, http://chartsbin.com/view/5576.

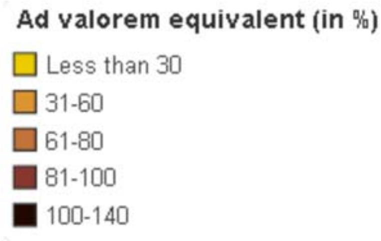
Figure 2: **Other Business Services**

Ad Valorem Equivalent

(in %)



Source: Fontagné, L., Guillin, A. & Mitaritonna, C. (2011). ChartsBin.com, http://chartsbin.com/view/5573.



References

Crozet, M., Milet, E. & Mirza, D. (2012), **The Discriminatory Effect of Domestic Regulations on International Services Trade**, *CEPII Working Paper*, 2012-02.

Dihel, N. & Shepherd, B. (2007). **Modal Estimates of Services Barriers**. *OECD Trade Policy Working Papers* 51, OECD Trade Directorate.

Fontagné, L. & Mitaritonna, C. (2009). **Assessing Barriers to Trade in the Distribution and Telecom Sectors in Emerging Countries**. *CEPII Working Paper,* 2009-37.

Fontagné, L., Guillin, A. & Mitaritonna, C. (2011). **Estimations of tariff equivalents for the Services Sectors**. *CEPII Working Paper,* 2011-24

Gootiiz, B. & Mattoo, A. (2009). **Services in Doha. What's on the table?** *World bank Policy Research Paper*, 4903.

Hoekman, B. (1996). **Assessing the General Agreement on Trade in Services. In The Uruguay Round and the Developing Countries**. Cambridge University Press.

Mattoo, A., Rathindran, R., & Subramanian, A. (2001). **Measuring services trade liberalization and its impact on economic growth: an illustration**. *Policy Research Working Paper Series* 2655, The World Bank.

World-Trade-Organization (2010). **World Trade Report**.

ON THE RESEARCH AGENDA

Unconventional Monetary Policies in the Eurozone

Since the beginning of the Greek crisis the European Central Bank resumed and reinforced its unconventional monetary policy measures implemented during the subprime crisis. First of all, it proceeded to the direct interventions in the specific segments of financial markets: euro zone public bonds and covered bonds. Furthermore, it increased the liquidity provisions to banks in both Euros and US Dollars. In particular, the ECB gradually increased the maturity of the long-term refinancing operations (LTROs) and in December 2011 it took an unprecedented decision to allot three-year loans at fixed interest rate. Finally, the conditions for collateral that the banks can pledge in the refinancing operations were relaxed. Specifically, the ECB allowed the collateral rules to vary by country which increased the pool of eligible collateral and enabled smaller banks to gain access to the central bank liquidity.

This study focuses on the impact of these non-standard measures on the euro zone economy and in particular on the effects of the 3-year LTROs. We present the main beneficiaries of the liquidity provided by the central bank and the use the banks made of the central bank money. In particular, we investigate whether these funds were placed at the ECB as precautionary hoarding of liquidity, distributed as credit to companies and households or employed to purchase public and private bonds. Furthermore, we discuss the transmission channels whereby these measures could stimulate the economy and the risk they entail.

Michel Aglietta, Benjamin Carton & Urszula Szczerbowicz

How Frequently Do Firms Export ? Evidence for France

This paper proposes studying export frequency as an additional margin of international trade. While extensive margins of products and destination define the scope of firm's export, export shipment frequency is determined by sale method choice and cost structure of the trade technology. We define export shipment frequency as the per annum number of shipments of a given product, by a firm to a given destination. In order to more deeply understand the trade cost structure and sale methods, we estimate gravity models on export frequency and other margins of trade using monthly firm-product-destination level export data from France. We show that in key predictions of the model are validated. During the recent trade collapse, we also find a great deal of stability in shipment frequency with a modest adjustment to declining GDP.

Gabor Békés, Lionel Fontagné, Balàzs Muraközy & Vincent Vicard

Regional Integration and Natural Resources: Evidence from Middle East and North Africa

This research builds on theoretical predictions showing that gains from regional integration are unevenly distributed between resource rich and poor countries. In a recent theoretical paper Venables (2011)[1] argues that we are likely to observe some degree of trade diversion when a resource rich country enters into a preferential trade agreement with a relatively labor abundant country. In such a case, the preferential agreement will create incentives for labor-intensive goods to be sourced from the resource poor country. This will help the resource poor country extend its regional exports and reach a higher level of economic growth. But this will be achieved at the expense of the resource rich country, which will experience trade diversion, as it substitutes imports from the relatively more efficient rest of the world towards the regional partner.

We propose to explore the effects of different integration schemes in the Middle East and North Africa. Results show that within the Pan Arab Free Trade Agreement, there is significant trade creation for resource poor countries associated with regional integration, and no evidence of trade diversion. In resource rich countries, however, there is evidence of pure trade diversion in both resource-rich/labor-abundant countries and resource-rich/labor-importing countries. This underscores the idea that regional integration can help to spread the benefits of unevenly distributed resource wealth among the region's economies.

Céline Carrère, Julien Gourdon & Marcelo Olarreaga

1 - Venables, A., 2011 ‘Economic integration in remote resource-rich regions’ in Costs and benefits of economic integration in Asia, R. Barro and J. W. Lee (eds) Oxford University Press

Are Export Support Programs Effective? Evidence from Tunisia

The focus of trade policy has shifted in recent years from economy-wide reductions in tariffs and trade restrictions towards targeted interventions to facilitate trade and promote exports. Most of these latter interventions are based on the new mantra of “aid-for-trade” rather than on hard evidence on what works and what doesn’t. Hence Cadot et alii (2011)[2] argue that on the one hand, rigorous impact-evaluation is needed to justify these interventions and to improve their design, and on the other hand, rigorous evaluation is feasible because unlike traditional trade policy, these interventions tend to be targeted and so it is possible to construct treatment and control groups. We propose to apply impact evaluation methods to an export promotion program in Tunisia.

The research evaluates the effect of the Export Market Access Fund (FAMEX), export promotion program in Tunisia, on the export performance of beneficiary firms using firm-level data. Propensity-score matching difference-in-difference and weighted least squares estimates suggest that beneficiaries expand at the intensive and the extensive margin (markets and products). However, this expansion is short-lived for total exports. Our results show a benefit from FAMEX in terms of survival in destination markets. Our evidence suggests that although treated firms significantly diversified in terms of markets and products, this did not result in reduced exposure to price risk on their portfolio of export markets. We also show no evidence of externalities from treated firms towards control firms.

Olivier Cadot, Ana Fernandes, Julien Gourdon & Aaditya Mattoo

2 - Cadot O., C. Carrere and V. Strauss-Khan, 2011. Export Diversification: what's behind the hump? Review of Economics and Statistics, *forthcoming*

DATABASES

MAcMap-HS6 2007

The MAcMap-HS6 dataset provides ad valorem equivalents of the protection applied by 164 reporters to 238 partners in the HS6 classification of international trade (5,113 products). Based on the same methodology (aiming at minimizing the endogeneity biais appearing when aggregating these data) used in the previous versions of this dataset (2001 and 2004), a unique feature of MAcMap-HS6 is to allow a meaningful average level of applied protection worldwide to be computed.

In 2007 (the most recent year avaible), this average was assessed to be 4.4% (Table 1). Averages by country or group of countries can also be computed. This is usually done by importer, since it is a way to summarize a country's trade protection. This approach confirms that developed countries are less protected on average (2.7% AVE applied tariff) than developing countries (8.0%), themselves less protected than LDCs (10.1%). While assessed average protection is particularly low in the US (1.7%), little variability is found among developed countries, with average protection not far from 3% in most cases. Variability is more pronounced among the developing countries, from 4.3% in Turkey (which trade policy is constrained by its custom union for industrial products with the EU) to 17.9% in India.

Table 1 : **Average applied and faced protection by group of countries and for selected countries**

(2007, AVE in %)

Country	Importer			
	All	Agric.	Textile	Indus.
	(a)	(b)	(c)	(d)
Developed	**2,7**	**14,6**	**7,8**	**1,7**
Australia	3,5	1,5	12,3	3,2
Canada	3,3	18,1	12,4	1,8
EU27	2,6	14,6	7,0	1,7
EFTA[1]	3,4	47,5	5,8	0,2
Japan	2,5	23,8	7,0	0,7
United States	1,7	5,5	9,8	1,1
Developing	**8,0**	**18,3**	**13,3**	**7,0**
ASEAN	5,3	11,8	8,2	4,7
China	6,3	9,2	9,2	5,9
India	17,9	60,5	15,1	14,3
Korea, Rep. Of	7,6	50,8	10,3	4,5
Maghreb	10,4	24,4	19,0	9,0
Mercosur	9,5	10,4	17,0	9,2
Mexico	6,6	15,5	15,7	5,4
Other SSA[1]	11,0	19,3	18,2	9,4
Pakistan	11,5	14,9	17,8	10,9
SACU[1]	5,3	13,7	22,5	4,0
Turkey	4,3	41,1	4,4	1,5
LDCs	**10,1**	**12,6**	**17,7**	**9,3**
Bangladesh	10,2	11,2	21,2	9,6
Sub-Saharan LDCs	9,2	11,3	17,9	8,4
World	**4,4**	**15,9**	**9,2**	**3,4**

Source : MacMap HS6.

1 - EFTA stands for "European Free Trade Association" which is a free trade organization between four European countries (Liechtenstein, Iceland, Norway, and Switzerland) . SACU stands for "Southern African Customs Union" which is a customs union among five countries of Southern Africa (Botswana, Lesotho, Namibia, South Africa and Swaziland). SSA stands for "Sub-Saharan Countries".

Differences across sectors illustrate the specificity of agricultural products, for which average protection reaches 15.9%, with extremely high assessed levels in India (61%), Korea (51%), EFTA (48%) and Turkey (41%). Only 7 countries (on 164 in our database) apply average rates lower for agriculture than for industry. On the whole, however, the differential of protection in agriculture is especially pronounced in rich countries and in some intermediate, but other intermediate countries exhibit higher protection in textiles-clothing (Mercosur, Pakistan and South Africa are examples), as do LDCs. Outside textiles-clothing, average protection in non-agricultural products remains low in most countries singled out. Only in Pakistan and India does the average exceed 10% in this sector.

Houssein Guimbard

Revising CEPII World Growth Projections to 2050: Focus on Education and Female Participation to the Labor Force

The world growth projections issued by the CEPII in December 2010 have been updated and a new documentation and database version are now available.

The new version introduces several significant changes:

- Productivity is corrected for the measurement bias on productivity caused by the presence of oil-production rents, assuming the oil sector is a pure rent.
- Education dynamics are more precisely described: we consider two measures of education (secondary and tertiary level), which we account for not only at the national level, but also by five-year age groups.

- Dynamics of Total Factor Productivity (TFP) have been reviewed in order to deal with methodological difficulties and to integrate the new measure of education.
- Female Labor Force Participation Rate (LFPR) now react to education dynamics. This topic is presented here.

Education catch-up

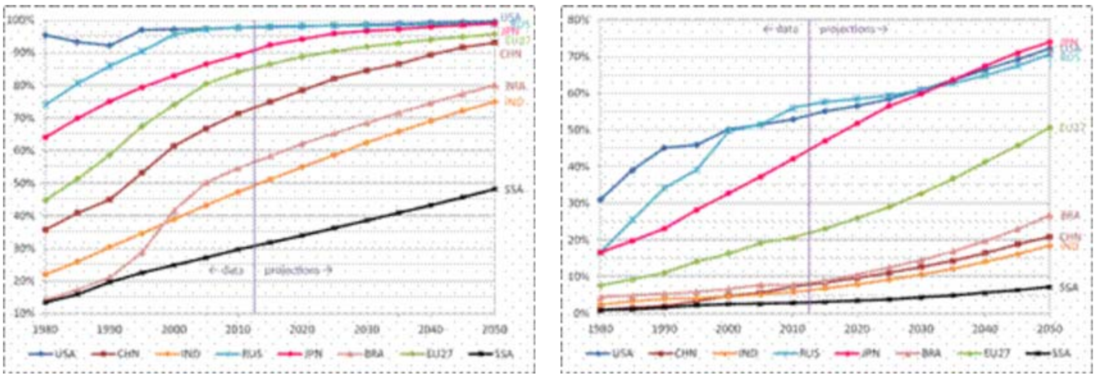
There are great disparities between countries regarding educational level. For instance, the share of people with a secondary level diploma in 2010 ranges from 4% (in Mozambique) to 98% (in Russia and the USA) of the total working-age population. However, these discrepancies tend to shrink over time. Educational level has increased everywhere in the world from 1980 onwards, though at different paces (see Figure 1).

Figure 1 – **Educational level in selected countries and zones, 1980-2050,**

(percentage of working-age population)

1a. Secondary

1b. Tertiary



Notations: USA = United States; RUS = Russian Federation; JPN = Japan; EU27 = European Union; CHN = China; BRA = Brazil; IND = India and SSA = Sub-Saharan Africa.

Source: Barro & Lee (2010) for data, Fouré et al. (2012) for projections.

Regarding secondary education, leader countries almost have a 100% attainment rate since 2005. Developing countries tend to catch-up at a relatively low speed, except during two acceleration periods for Brazil (1990-2005) and China (since 1990).

The highest level of tertiary education in the working-age population in 2010 is 56% in Russia. Differences accross countries are larger in terms of growth rates than for secondary education.

In both cases, our projections use age-group-specific convergence speeds estimated at the broad regions level and therefore tend to extend the growth disparities over time, though the catch-up in levels occur.

Dynamics of female participation to the labour force

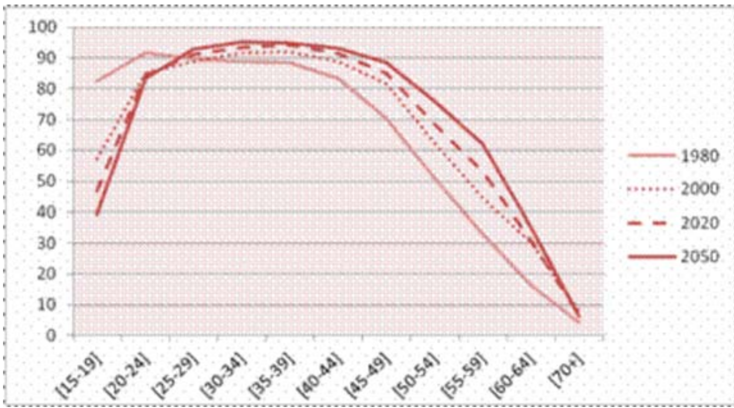
Education has several impacts on the macroeconomic projection. In addition to its contribution to TFP growth, we also consider its link to female participation to the labour force. Our findings are that two different effects compete. First, the more educated women are, the more they participate to the labor force market. Second, because of further education, their participation decreases for the youngest age groups (15-19 and 20-24) .

This relation results in contrasted evolution of female participation, as shown in Figure 2. Various profiles appear. For instance in China, female activity rate is already low for the two youngest age groups and high for the 25-45 age group. Increases in female participation then occur in the top age-groups. In India or Morocco, it is quite low and therefore the magnitude of changes is larger both for the studying and the labor participating age groups.

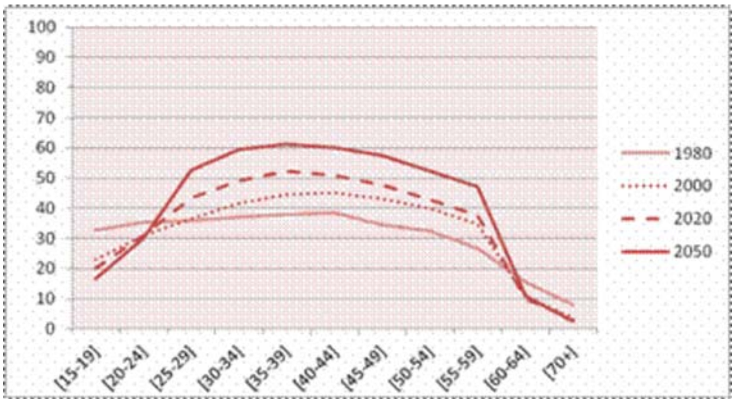
Figure 2 – **Female Labor Force Participation Rate by age group, 1980, 2000, 2020 and 2050**

(Percentage of population within age-group)

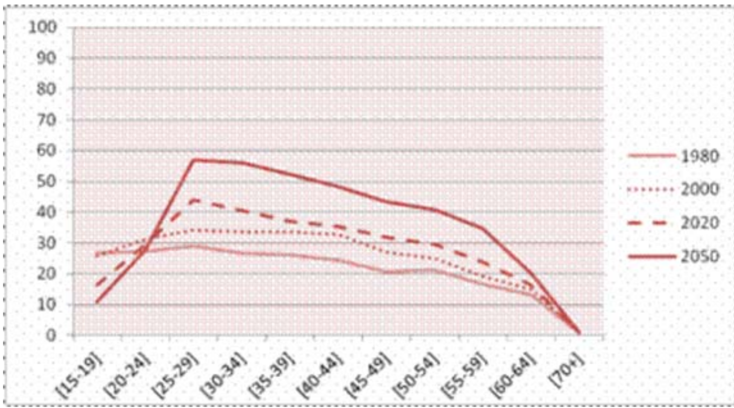
2a. China



2b. India



2c. Morocco



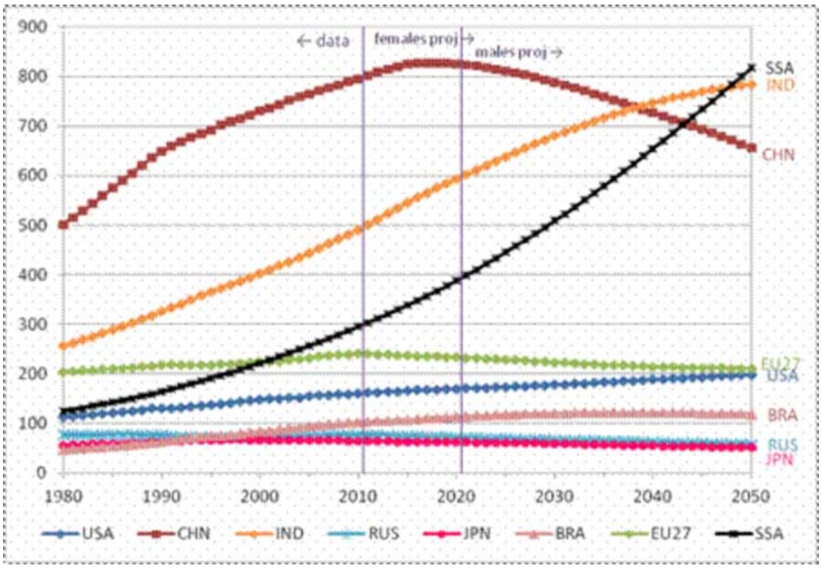
Source: International Labor Organization for data, Fouré et al. (2012) for projections.

Economically active population and its impact on GDP

These changes in female participation rates impact GDP mainly through the channel of the total labor force (displayed in Figure 3). Contrary to the EU, the United States keeps a dynamic active population. The three "giants" of developing countries compete over the projection period for the leading position in active population, with the Sub-Saharan African one being the more dynamic.

Figure 3 – **Economically Active Population, 1980-2050**

(million persons)

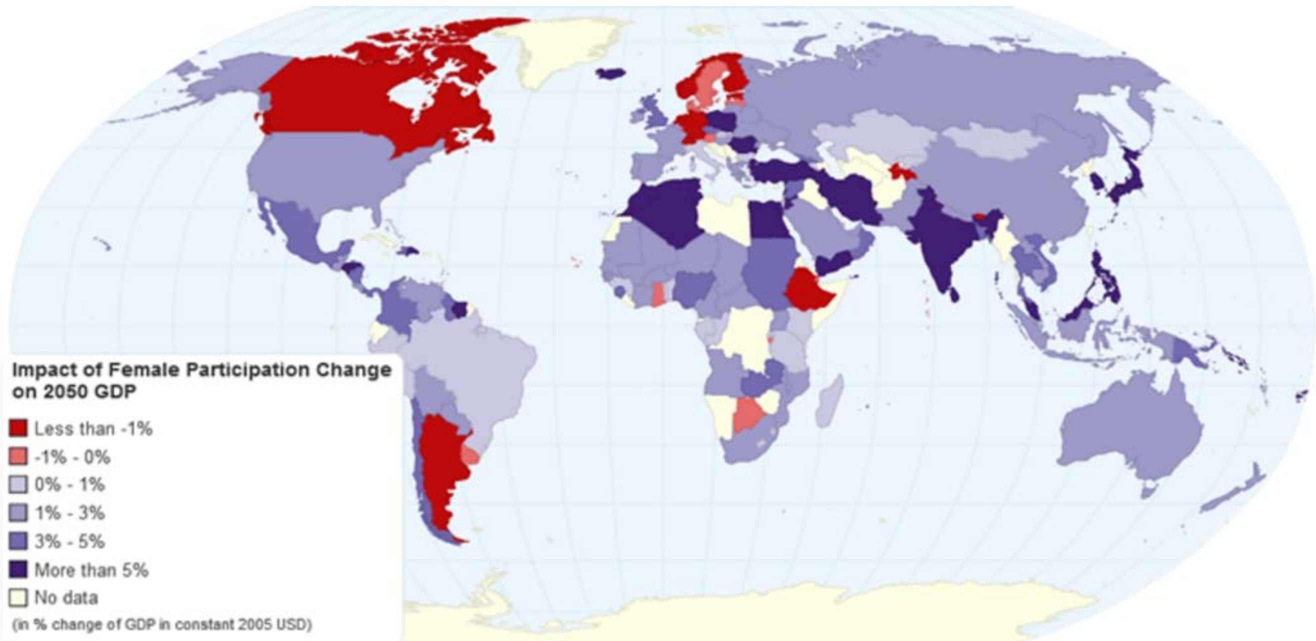


Notations: See Figure 1.

Source: International Labor Organization for data, Fouré et al. (2012) for projections.

The evolution of female participation between 2012 and 2050 lead to various changes in the projected GDP by 2050 (Figure 4). Three different country profiles appear. First, many benefit from the female activity increase (in particular Turkey (+14%) and Egypt, +11%). For other countries the contraction in female participation among the youngest age groups fails to be compensated by the increase in other groups. For developing countries, this may be due to the slow evolution of education (for instance Argentina or Ethiopia). In developed economies (Canada or Germany), this is because participation rates of women over 25 are already very high (80 to 85%) and cannot balance the increasing share of students.

Figure 4 **– Change in 2050 GDP due to female participation rate changes**



Source: Fouré et al. (2012) and own calculations. ChartsBin.com, http://chartsbin.com/view/5128.

Jean Fouré

Jean Fouré, Agnès Bénassy-Quéré & Lionel Fontagné (2012), "The Great Shift: Macroeconomic Projections for the World Economy at the 2050 Horizon", CEPII Working paper 2012-03. Available at http://www.cepii.fr/anglaisgraph/bdd/baseline.htm (version 2.0)

Data for 1980-2010 is available from the Barro and Lee (2010) dataset (http://barrolee.com/), September 2011 revision.

We provide a first attempt to include off-balance sheet, implicit insurance to SIFIs into a consistent assessment of fiscal sustainability, for 27 countries of the European Union. We first calculate tax gaps à la Blanchard (1990) and Blanchard et al. (1990). We then introduce two alternative measures of implicit off-balance sheet liabilities related to the risk of a systemic bank crisis. The first one relies of microeconomic data at the bank level. The second one relies on econometric estimations of the probability and the cost of a systemic banking crisis, based on historical data. The former approach tends to maximize the fiscal cost of systemic banking crises, whereas the latter one tends to minimize it. Hence we believe that the combined use of these two methodologies helps to gauge the range of fiscal risk.

Agnès Bénassy-Quéré, Guillaume Roussellet

Low-Wage Countries' Competition, Reallocation Across Firms and the Quality Content of Exports
N°2012- 04 February 2012

We consider the impact of low-wage countries' competition on the quality content of high-wage countries' exports. We develop a new method that uses firm-level data to measure quality changes in sectoral exports. Over 1995-2005, we measure a 11% increase in the mean quality of France's aggregate exports. Quality upgrading is driven by a reallocation of demand in favor of higher quality producers. The phenomenon is significantly more pronounced in markets where the penetration of developing countries has increased while it goes the opposite direction where firms face increased competitive pressures from high-wage countries. These results are consistent with within-product specialization along the vertical dimension. They suggest that, over the period, France has specialized in the production of higher quality goods. In our data, around one fifth of the measured quality improvement in France's aggregate exports is attributable to low-wage countries' competition.

Julien Martin, Isabelle Méjean

The Great Shift: Macroeconomic projections for the world economy at the 2050 horizon
N°2012- 03 February 2012

We present growth scenarios for 147 countries to 2050, based on MaGE (Macroeconometrics of the Global Economy), a three-factor production function that includes capital, labour and energy. We improve on the literature by accounting for the energy constraint through dynamic modelling of energy productivity, and departing from the assumptions of either a closed economy or full capital mobility by applying a Feldstein-Horioka-type relationship between savings and investment rates. Our results suggest that, accounting for relative price variations, China could account for 33% of the world economy in 2050, which would be much more than the United States (9%), India (8%), the European Union (12%) and Japan (5%). They suggest also that China would overtake the United States around 2020 (2040 at constant relative prices). However, in terms of standards of living, measured through GDP per capita in purchasing power parity, China would still lag 10 percent behind the United States at the 2050 horizon.

Jean Fouré, Agnès Bénassy-Quéré, Lionel Fontagné

The Discriminatory Effect of Domestic Regulations on International Services Trade
N°2012- 02 January 2012

In order to develop trade in services, the GATS aims to eliminate progressively discriminatory regulations, which apply to foreign suppliers. This paper looks instead at the trade effect of domestic regulations, which apply to all firms indifferently and do not intend to exclude imports. We propose a theory-based empirical test to determine whether or not these domestic regulations affect more foreign suppliers than local ones, through the sign of their effect on the trade margins. We then apply it on French firm-level exports to OECD countries in professional services. Our econometric results show that domestic regulations in the importing markets do matter significantly for trade in services. They reduce both the decision to export and individual exports. A 10% percent increase in regulations reduces services export values by more than 7% and the probability of exporting with respect to that of not exporting by 2.8%. This result tends to prove that domestic regulations are discriminatory de facto even if they are not de jure.

Matthieu Crozet, Emmanuel Milet, Daniel Mirza

Optimal Food Price Stabilization in a Small Open Developing Country
N°2012- 01 January 2012

This paper analyzes food price stabilization policies in a small, open, developing country. Without public intervention, price dynamics are driven by domestic productive shocks and international prices. Trade and/or storage policies are optimally designed to increase welfare, in a context where consumers are risk-averse and markets are incomplete. An optimal storage policy on its own is detrimental to consumers, since its stabilizing benefits leak into the world market. In contrast, optimal combination of storage and trade policies results in a powerful stabilization of domestic food prices. Such a policy mix includes export restrictions, which are harmful to export partners, but to refrain from using them is costly and entails substantial transfers from consumers to producers.

Christophe Gouel, Sébastien Jean

Export Dynamics and Sales at Home
N°2011- 33 December 2011

How do firms' sales interact across markets? Are foreign and domestic sales complements or substitutes? Using a large French firm-level database that combines balance-sheet and product-destination specific export information over the period 1995-2001, we study the interconnections between exports and domestic sales. We identify exogenous shocks that affect the firms' demand on foreign markets to instrument yearly variations in exports. We use alternatively as instruments product-destination specific imports or tariffs changes, and large foreign shocks such as financial crises or civil wars. Our results show that exogenous variations in foreign sales are positively associated with domestic sales, even after controlling for changes in domestic demand. A 10% exogenous increase in exports generates a 1.5 to 3% increase in domestic sales in the short-term. This result is robust to various estimation techniques, instruments, controls, and sub-samples. It is also supported by the natural experiment of the Asian crisis in the late 1990's. We discuss various channels that may explain this complementarity.

Nicolas Berman, Antoine Berthou, Jérôme Héricourt

Entry on difficult export markets by Chinese domestic firms: the role of foreign export spillovers
N°2011- 32 December 2011

In this study, we explore how the intensity of foreign export spillovers in China varies depending on the difficulty of entry on export markets. We rely on different proxies to define what a “difficult” country is and we find that the presence of surrounding foreign exporting firms helps domestic ones to start exporting, especially when destination countries are difficult. While on average exposure to foreign exporters is associated with a 10% increase of the probability that domestic firms from the same province start exporting the year after, the figure is around 50% higher when the targeted destination country is identified as difficult. Our results are consistent with the idea that exposure to foreign exporters helps to reduce the fixed cost of creating new trade linkages. Our finding hence suggests that the increasing presence of foreign exporting firms in China might contribute to the diversification of Chinese domestic firms‟ exports towards more difficult and previously inaccessible destinations.

Florian Mayneris, Sandra Poncet

French Firms at the Conquest of Asian Markets: The Role of Export Spillovers
N°2011- 31 December 2011

In this study, we explore the role of export spillovers on the capacity of French firms to conquer Asian markets. We confirm, in the context of France, previous results emphasizing the positive impact of surrounding exporters on the probability that a firm starts exporting a given product to a given country. We find that export spillovers are more important for export starts to Asia than for export starts to other countries. Moreover, for the specific Asian destinations, we find evidence of a heterogeneous effect of export spillovers. The presence of surrounding exporting firms appears especially beneficial to small and less productive firms, and more intense for export starts to Asian countries characterized by low GDP per capita and tough administrative procedures on imports. Hence, export spillovers may help small firms to enter on the most difficult Asian markets.

Florian Mayneris, Sandra Poncet

Environmental policy and trade performance: Evidence from China
N°2011- 30 December 2011

This paper aims at assessing the impact of environmental regulations on the export activity of firms in China. The environmental policy we study is the so- called Two Control Zones (TCZ) policy, which has been implemented in 1998 in China. The aim of this policy was to reduce the sulfur dioxide (SO2) emissions in targeted cities with particularly high air pollution. We use a data set of 265 Chinese cities for the years 1997 to 2003, and exploit variations across time, sectors and firm types to extract the causal effect of the policy on firms' performance. We indeed expect the TCZ policy to have a larger impact the heavier the pollution content of the activity and the lower the political status of the firm. In line with the political pecking order of firms that exists in China, we expect the impact of the environmental policy to be mitigated by state ownership. Our results are in line with our expectations and suggest that the TCZ policy has been effective. We find that State-owned firms are less intensively affected and thus able to export relatively more, especially in energy intensive sectors. By contrast, we see a relative decline in foreign and private firms' exports; the more the energy-use of the sector the larger the decline.

Laura Hering, Sandra Poncet

Immigration, unemployment and GDP in the host country: Bootstrap panel Granger causality analysis on OECD countries
N°2011- 29 December 2011

This paper examines the causality relationship between immigration, Unemployment and economic growth of the host country. We employ the panel Granger causality testing approach of Kónya (2006) that is based on SUR systems and Wald tests with country specific bootstrap critical values. This approach does not assume that the panel is homogeneous and it allows to detect for how many and for which countries of the panel there exists one-way Granger-causality, two-way Granger-causality or no Granger-causality, and takes into account for possible contemporaneous dependence across countries. Using annual data over the period 1980-2005 for 22 OECD countries, we find that, only in Portugal, unemployment negatively causes immigration, while in any country, immigration does not cause unemployment. On the other hand, our results show that, in four countries (France, Iceland, Norway and United Kingdom), growth positively causes immigration, while in any country, immigration does not cause growth.

Ekrame Boubtane, Dramane Coulibaly, Christophe Rault

Index Trading and Agricultural Commodity Prices: A Panel Granger Causality Analysis
N°2011- 28 December 2011

This paper investigates the causality between prices and index-based trading activity for twelve grain, livestock, and other soft commodity futures markets. We use panel Granger causality estimations based on SUR systems and Wald tests with market-specific bootstrap critical values. This approach allows to test for causality on each market by accounting for the possible contemporaneous dependence across markets. Our results confirm that there is no causality between index-based positions and commodity futures prices.

Gunther Capelle-Blancard, Dramane Coulibaly

The Impossible Trinity Revised: An Application to China
N°2011- 27 December 2011

In a fixed exchange-rate regime, monetary policy is not devoted to internal equilibrium, such that the Taylor principle is no more the condition to insure the determinacy of the dynamic. Monetary policy is in charge of stabilizing the fixed-exchange rate regime in the long run, i.e. to avoid an excessive accumulation of foreign reserves, or their depletion. For this purpose, the monetary policy rule has to include the evolution of the net foreign asset position. Stabilizing the fixed exchange-rate regime entrenches the ability of monetary policy to influence the internal equilibrium, despite sizable restrictions on capital mobility. This translates into a restriction on implementable monetary-policy rules. Ill-designed monetary-policy rules generates long-lasting fluctuations of the trade balance and the real exchange rate.

Benjamin Carton

Isolating the Network Effect of Immigrants on Trade
N°2011- 26 December 2011

Within the migration-trade nexus literature, this paper proposes a more carefully defined measure of migration business networks, and quantifies its impact on bilateral trade. Controlling for the overall bilateral stock of migrants, the share of migrants employed in managerial/business-related occupations has a strong additional effect on trade, and especially on exports. Those immigrants should be the ones directly involved in the diffusion of relevant information for trading companies. Their presence, more than the presence of immigrants overall, or of highly educated immigrants, is found to enhance trade. When we control for the presence of highly educated immigrants, the share of immigrants in business network occupations shows a particularly large effect on trade in differentiated goods. Specifically, we find that highly educated individuals in business-related occupations are those enhancing export by the largest margin. Business network effect is particularly important for culturally different countries, such as the ones with different legal origin.

Mariya Aleksynska, Giovanni Peri

Notes on CEPII's distances measures: The GeoDist database
N°2011- 25 December 2011

GeoDist makes available the exhaustive set of gravity variables used in Mayer and Zignago (2005). GeoDist provides several geographical variables, in particular bilateral distances measured using citylevel data to assess the geographic distribution of population inside each nation. We have calculated different measures of bilateral distances available for most countries across the world (225 countries in the current version of the database). For most of them, different calculations of "intra-national distances" are also available. The GeoDist webpage provides two distinct files: a country-specific one (geo_cepii)and a dyadic one (dist_cepii) including a set of different distance and common dummy variables used in gravity equations to identify particular links between countries such as colonial past, common languages, contiguity. We try to improve upon the existing similar datasets in terms of geographical coverage, quality of measurement and number of variables provided.

Thierry Mayer, Soledad Zignago

Estimations of Tariff Equivalents for the Services Sectors
N°2011- 24 December 2011

Methodological issues arising from the estimation of tariff equivalents of barriers to services trade are very relevant for policy. These equivalents are used extensively to compute welfare gains and resource reallocations associated with partial liberalization of the sector; any measurement errors will strongly affect the estimated gains. Using the Global Trade Analysis Project (GTAP) database, we rely on socalled quantity based methods to derive tariff equivalents from a gravity equation estimated at sectoral level for 9 services sectors and 65 countries. We also estimate trade equations for services using cross section data, and improve on the methodology of Park (2002). We investigate whether relying on cross section rather than panel data leads to differences in the estimated equivalents. Finally, we compare the estimations based on reconstructed and actual data. We conclude that although use of partially reconstructed data (such as GTAP) affects the results, the equivalents obtained are good representations of the magnitude of protection for services in the various countries analyzed, although with larger deviations for developing economies.

Lionel Fontagné, Amélie Guillin, Cristina Mitaritonna

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RECENT PUBLICATIONS

LA LETTRE DU CEPII, MONTHLY

Don't Let the Eurozone Crisis Go East
N° 318, January 2012

While the sovereign debt crisis continues worsening in the Euro area, European partners are still hesitating in offering some help, considering that Europe must rely primary on its own resources and fix its failed governance. Still, this crisis constitutes a new, major risk for other countries, especially in Asia. Not only is Europe a large market that needs to be kept solvent, but Asian countries could have a stake in the survival of the euro that, for the next decade, is likely to provide the only credible complement to the US dollar as an international currency. Financial assistance would best be channelled through the International Monetary Fund in exchange for further reforms in the governance of the Fund. Additionally, Asian countries can contribute to solve the Euro area crisis by offering dynamic markets to European firms through faster rebalancing of Chinese growth and further opening up of local markets. This Lettre du CEPII draws on the seventh meeting of the Asia-Europe Economic Forum held in Seoul on 9 December 2011.

Agnès Bénassy-Quéré, He Fan, Masahiro Kawai, Tae Joon Kim,, Yung-Chul Park, Jean Pisani-Ferry,, David Vines & Yu Yongding

Industry or Services: The European Specialization Dilemma
N° 317, December 2011

Since 2000; international trade has been characterized by a strong demand for primary products; an acceleration of exports from large emerging countries and a rise in trade in services under the leadership of developed countries. How did European specialization evolve in such environment? Europe turns out to have strengthened its tertiary specialization while keeping a strong industrial positioning; in this respect; it stands between the United States and Japan. Further analysis of European countries' comparative advantages shows a great diversity and significant recomposition over the past decade. While most; countries within the European Union maintain a solid industrial specialization and/or have reinforced their specialization in new services; the comparative advantages of some member States are still concentrated in traditional services with a weak growth potential.

Colette Herzog, Deniz Ünal

What Benefits from Completing the Single Market
N° 316, December 2011

European integration is endangered by rising fears of sovereign default. Against this background, assessing the economic impacts attached to the Single Market is crucial to measuring the overall benefits provided by the European Union to its citizens. Over the last thirty years, substantial progress has been achieved to better integrate the markets of the member states. New evidence on barriers to trade in services and on non-tariffs obstacle to trade in goods confirms however that this process is far from being complete. Our economic simulation using the MIRAGE model concludes that the elimination of all remaining obstacles to trade would benefit the European Union by an order of magnitude two to three times larger than those already reaped so far. The complete elimination of obstacles to trade across the Single Market is indeed a stylised and unrealistic assumption. However, the magnitude of the potential gains is such that the study confirms undoubtedly the potential of the Single Market as one avenue to boost EU growth in the years to come and to escape from a vicious circle of recession.

Vincent Aussilloux, Charlotte Emlinger, Lionel Fontagné

FORTHCOMING

April 10, 2012
Credit Rating Agency Regulation: Implications for Issuers and Investors
Workshop co-oganized by le Club du CEPII, ICFR and Milken Institute

April 12, 2012
XIth Doctoral Meetings in International Trade and International Finance
April 12th to 14th 2012 Workshop organized by the network Research in International Economics and Finance – RIEF

June 14, 2012
Changing the rules of the game
Franco-German workshop on the Euro Area organised by CEPII, SWP, Club du CEPII,CAS and EADS.

October 19, 2012
Trade and Climate Change
CALL FOR PAPERS X EURO-LATIN STUDY NETWORK ON INTEGRATION AND TRADE (ELSNIT) MILAN, ITALY, OCTOBER 19-20, 2012

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Chief Editor: DOMINIQUE PIANELLI

Address: CEPII - 113, rue Grenelle - 75007 Paris - France
Tel. (33) 1 53 68 55 00 - Fax: (33) 1 53 68 55 03
http://www.cepii.fr