



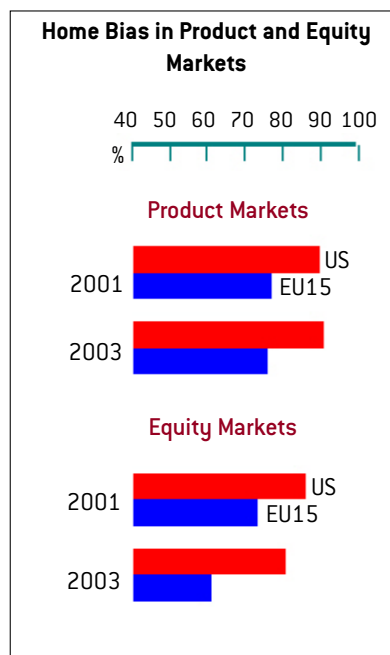
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SINGLE MARKET TRAILS HOME BIAS

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SUMMARY It is now 20 years since the Single Market Programme was launched with the goal of eliminating barriers to the movement of goods, services, capital and people. Over this period the EU has made substantial progress through a truly impressive legislative effort. But in the process have Europeans really become more “European”? **While large industries have embraced the opportunities of the Single Market to become more international in outlook, Europeans basically continue to shop, invest and work at home.** And though equity markets are still making progress, the integration of product markets appears to have stalled, and labour remains largely fragmented.



Source: Bruegel estimates based on OECD & IMF CPIS.

POLICY CHALLENGE

Despite the improvements in integration of European markets, home bias remains high. While there was a fall in home bias in equity markets during 2001-2003 not much has changed in product markets. This adds weight to the argument that traditional internal market policies may have had their day and it is time for a rethink. Policies for the 21st century must adapt to an increasingly service-oriented and innovation-driven economy. The focus should be on favouring entry and competition, facilitating the diffusion of innovation, and creating conditions for a further integration of the value chains across Europe. Reforms should also aim to reduce the imbalances in integration across countries and across markets. A single currency cannot deliver without a Single Market.



THE Single Market Programme (SMP) was launched in the mid-80s with the aim of enhancing growth and competitiveness in Europe through the creation of an area without internal frontiers allowing the “free movement of goods, persons, services and capital”.

The end result should have been a more integrated Europe in which “home countries” were less relevant in consumers’, investors’ and workers’ decisions.

But 20 years later, national borders still matter and there is widespread disillusion about what further progress can be expected. Some observers dismiss integration efforts as pointless and claim that nations are here to stay. Others argue that the economic model underpinning the SMP is exhausted and that a new approach to market integration is needed.¹

In spite of international specialisation and outsourcing, countries’ consumption baskets and investment portfolios still contain a predominant share of domestically produced products and domestic assets (not to mention the predominance of national-born workers in national labour markets). This is commonly known as the “home bias puzzle” (see Box 1). Market

integration policies aim at removing those obstacles that prevent mobility of products, capital and people across borders. One sign of success would be more consumption of foreign goods, a rise in foreign assets in investment portfolios, and an increase in foreign workers in national labour markets.

But just what would a fully integrated economy look like? This policy brief assesses in a simple way the extent to which economic decisions have become less domestic and more European by looking at the evolution of “home bias” in consumption, investment and labour decisions. The same methodology is applied to product and equity markets, which allows the comparison of results across countries and across markets. The analysis complements the previous issue of this series (Véron, 2006) which examined the meaning of “home” for European businesses.

Section 1 presents a number of indicators for home bias and analyses how the EU15 compare to other countries according to these indicators. Section 2 looks at some explanations for home bias and examines its evolution and economic consequences. Finally, section 3 provides some policy recommendations.

1. MEASURING HOME BIAS

We define “home bias” as the excessive consumption or absorption of domestically produced products, or excessive investment in domestic equity compared with two theoretical benchmarks.

● In the first one (a “Frictionless Economy”²), the share of a country in any consumption basket is determined by the size of its economy. This definition assumes that in the absence of home bias consumers have equal access to and no preferences for goods or assets from any part of the world. Therefore, the amount of products and assets from each country is determined by the share of that country in the world production and market capitalisation respectively.

A limitation of the first benchmark is that it ignores the role of distance. Hence, it assumes that only Australia’s weight in OECD production should determine the share of Australian-produced products in, say Hungarian total consumption. This is obviously extreme.

● The second benchmark (an “Integrated Economy”³) recognises the role of distance. It is based on actual trade data (which implicitly

¹See the European Commission public consultation on the Future of the Internal Market at http://ec.europa.eu/internal_market/strategy/index_en.htm.

²For example, as Germany accounts for 9% of OECD production, German products should weight 9% in each consumption basket in the absence of home bias. In reality, German products account for 85% of German consumption. The home bias therefore amounts to 76 percentage points (85% minus 9%).

³For example, using data on bilateral trade with other countries it is estimated that Germany would import 12% of its total consumption from a country equal in size and distance. The current share of domestic products in consumption in Germany is 85%. The home bias using this benchmark is therefore 73% (i.e. 85% minus 12%).

BOX 1 THE ‘HOME BIAS PUZZLE’

The inability of economic theory to explain the empirical observation that consumers over-purchase domestically produced goods and services and investors over-invest in domestic equity is known as the “home bias puzzle”. The attempts to quantify and explain the “home bias puzzle” are pervasive in recent economic literature. McCallum (1995) first estimated that the trade between Canadian provinces is 20 times greater than the trade between border US states and Canadian provinces, even if there were no substantial barriers to trade. Nitsch (2000) estimates that on average EU countries trade internally 7 to 10 times more than with partner countries (after adjustment for size, distance and other variables). Equally, for asset holdings, Portes and Rey (2005) quantify the size and determinants of financial home bias. However, the explanation and policy implications of the existence of home bias are not fully convincing in the literature. Recent literature has explored the links between trade and financial markets (see e.g. Obstfeld and Rogoff, 2000) in order to explain home bias in financial markets. Frictions in product markets could be responsible not only for home bias in product markets but also for the excessive home bias in equity markets that otherwise would not be consistent with the current degree of globalisation of financial markets. Lane and Milesi-Ferretti (2004) offer empirical evidence of this link. Finally, most recent literature finds that incomplete contracts between final goods producers and intermediate suppliers, and lack of a common institutional setting, could play an important role in explaining home bias (Antras, 2003).



reflects existing obstacles to trade) and defines a country's home bias as the difference between what it trades with itself and what it would trade with a country of similar size and distance.⁴

The two benchmarks can be calculated in a similar way for equity holdings. (See Box 2 for formulae.)

Neither of the benchmarks is perfect and they involve a number of caveats.⁵ The first one is more straightforward but lacks realism. The second is closer to reality but depends on estimated parameters.

We use OECD countries as a reference for integration. The aim of taking such a broader sample is to analyze whether there are differences in integration between EU members and other countries. Intra-OECD imports account for 70 % of total OECD imports.⁶

EUROPEANS SHOP LOCALLY

Europeans have a strong bias for goods and services produced within the EU. Of all the OECD products consumed in the EU15, 96% come from the EU15. The weight of nationally-produced goods and services in domestic demand is similar in the US.

The key question, however, is how much EU15 countries trade among themselves. The answer is: Not a

'Of all the OECD products consumed in the EU15, 96% come from the EU15.'

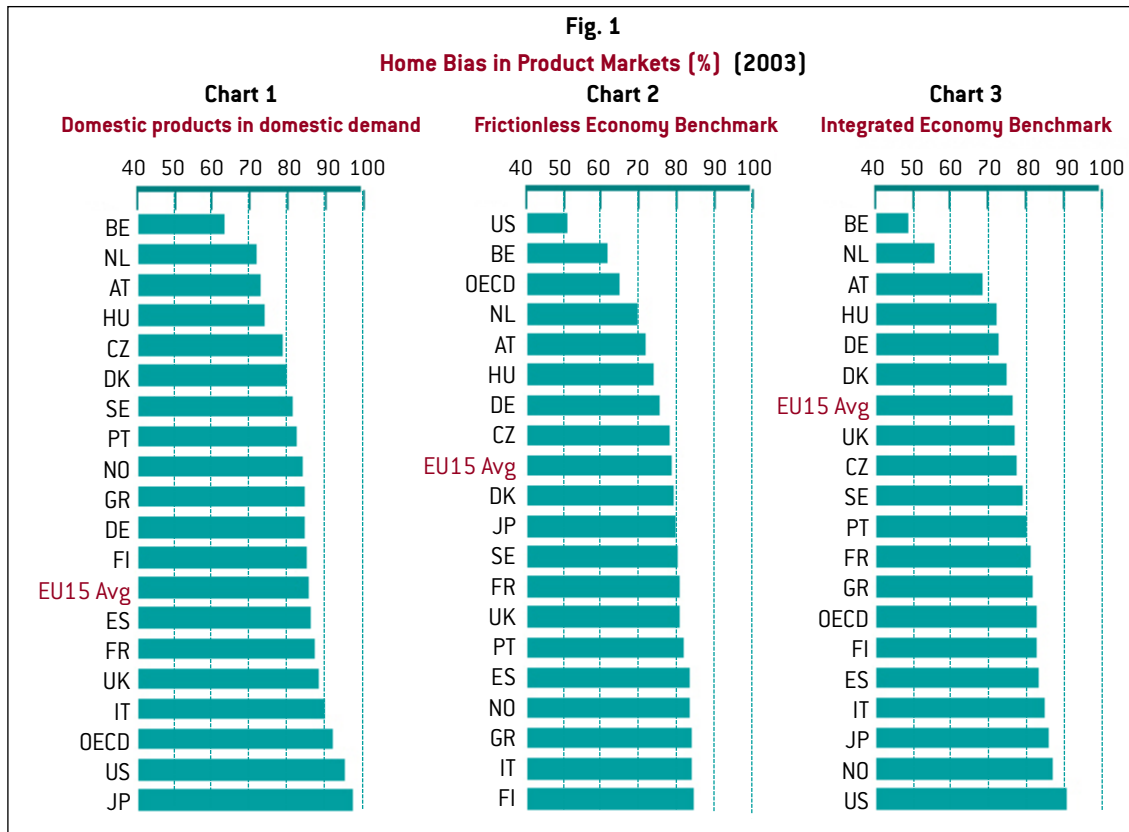
great deal. On average, an EU15 country spends 86% on national products, 10% on products from other EU15 countries and 4% on products from

other OECD countries (Chart 1 in Fig. 1).

The first benchmark ignores geographic distance, as would be appropriate in a "Frictionless

Economy" (Chart 2 in Fig. 1). As the EU15 countries' share of domestic products is well above their share in OECD production, they appear to be highly home biased. By contrast, the US which accounts for close to 45% of OECD production appears to be much less home biased. The same is actually true, though to a lesser extent, for the EU as a whole, whose home bias is only 60%.

Introducing geographic distance generally reduces the home bias of EU countries but does not remove it (Chart 3 in Fig. 1). Trade within the typical EU country remains much higher than one would expect in an "Integrated Economy" and trade among them, or with the rest of the world, much lower. Distance also changes the picture for the US, however in the opposite way: it now appears to be more home biased than the countries of the EU.



Source: Bruegel estimates based on OECD and CEPII. SE, ES and NL (2002 data). OECD excluding Australia, New Zealand, Korea, Ireland, Iceland, Poland, Slovak Republic, Switzerland and Turkey. EU15 excluding Ireland.

⁴The distance of a country to itself converges to zero when its size diminishes. It increases with the geographical size of the country.

⁵For example, both assume that all products in the economy are fully tradable. This assumption, although unrealistic, provides a benchmark for the limits of integration.

⁶The share varies however from country to country e.g. while the share of imports from OECD countries in total imports is between 80 and 85 percent in most EU states, it is around 60 percent in the US and 40 percent in Japan.



On a country-by-country basis, home bias is generally lower in core EU15 countries (Netherlands, Belgium, Austria and Germany) than in the periphery (Greece, Italy, Spain, Nordic countries).

Amongst new member states, the Czech Republic and Hungary have a lower degree of home bias than the EU15 average, which reflects the increasing integration of these countries with Western Europe.

In conclusion, home bias remains very large in the EU and it is similar to other OECD countries when we account for country size and distance.

EUROPEANS INVEST AT HOME

Europeans also invest heavily in the EU15: 83% of their equity

wealth is invested within the EU15 which is slightly lower than the share Americans invest within the US.

The average EU15 country invests around 65% of its equity wealth at home, 18% in other EU15 countries and 17% in other OECD countries. On average, EU15 countries invest at home less than OECD countries, which invest domestically 80% of their equity wealth (Chart 1 in Fig. 2).

In a “Frictionless Economy” (Chart 2 in Fig. 2), once again since EU15 countries’ market capitalisation is small, their home bias appears high. The US, even though it invests more than EU countries at home, appears less home biased than the typical EU15 country since it accounts for half of the

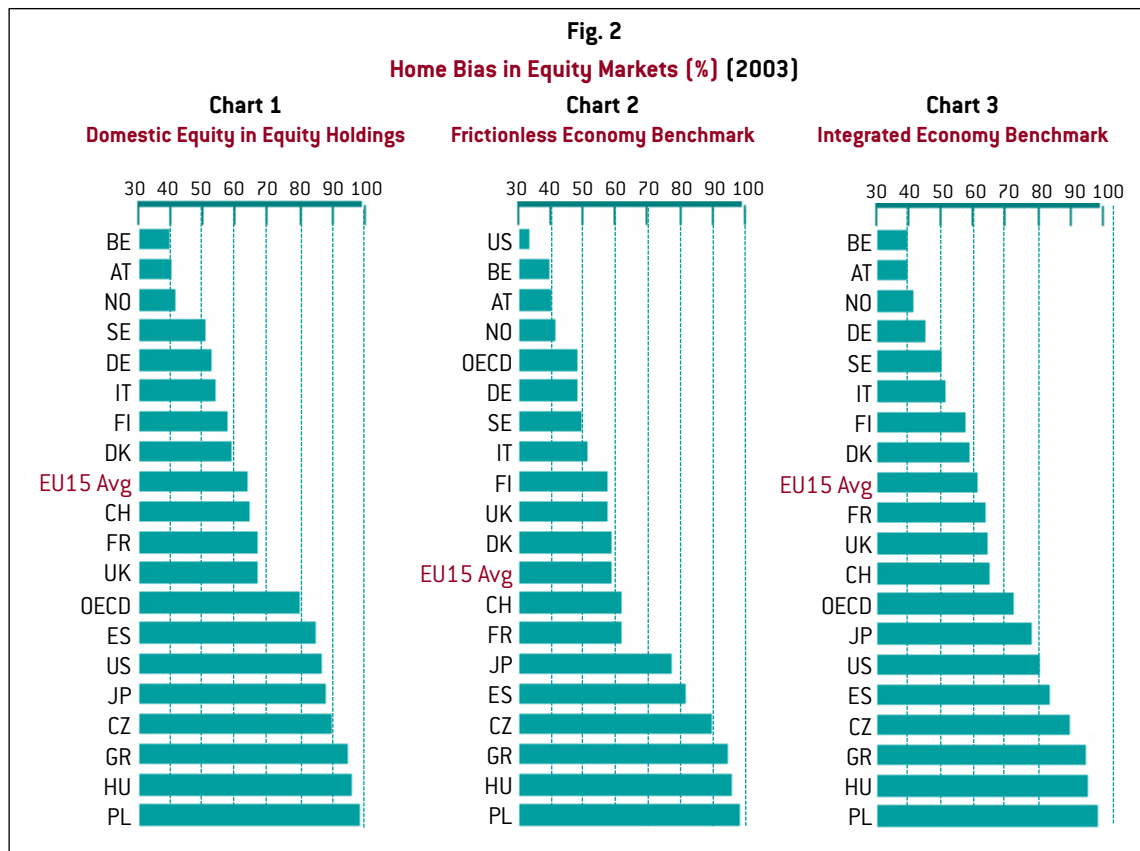
total OECD market capitalisation. Home bias of the EU as a whole is around 58%.

Distance in the case of equity holdings is a proxy for transaction and especially information costs. Introducing distance into the picture does not affect the home bias of EU countries much (Chart 3 in Fig. 2). However, it does change the picture for the US, which now appears to be much more home biased than the average EU country.

Within the EU there are large asymmetries in the degree of diversification: holdings of domestic equity range from 41% in Austria to 93% in Greece. Austria, Belgium, Italy, Sweden and Germany invest the least in domestic equity⁷ while Greece and Spain invest heavily in domestic equity. New Member States’ equity wealth is mainly domestic.

‘Home bias in the EU is similar to other OECD countries when we account for country size and distance.’

Fig. 2
Home Bias in Equity Markets (%) (2003)



⁷Austria and Italy are amongst the smallest financial markets in the EU, what to some extent might explain their higher investment in foreign assets.

Source: Bruegel estimates based on IMF CPIS, Eurostat and CEPII. OECD excluding Korea, Turkey, New Zealand, Ireland, Luxembourg, Iceland, Netherlands and Portugal. EU15 excluding Ireland, Luxembourg, Netherlands and



Home bias in holdings of domestic equity by EU countries is lower than in trade but still large if one takes into account that the costs of investing abroad are much lower than the costs of goods and services trade.

EUROPEANS DO NOT TRAVEL TO WORK

The same methodology can be used for assessing home bias on the labour market but the results are not very informative since the geographical mobility of labour is very low in Europe. This applies not only cross border but also within-countries, especially compared to the US.

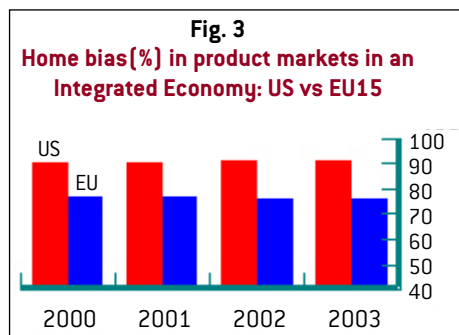
The share of Europeans working in an EU country different to their home country is less than two per cent. Given the low mobility of workers, the ranking of countries according to any home bias indicator would be determined by the size of the country.

2.WHAT IS WRONG WITH HOME BIAS?

Summing up, Europeans work, mostly shop, and even to a large extent invest at home. Despite the process of European integration, the degree of home bias in the three markets remains considerable.

But are things changing as a consequence of the Single Market Programme? Not much.

Home bias in product markets has not substantially changed over the past few years (Fig. 3). Unfortunately, long enough series including services are not available. However, if we look only at goods (Fig. 4) we see that home bias in the EU decreased substantially between the mid-90s and 2000 but the momentum decreased afterwards. In fact, intra-EU trade in goods grew faster than GDP between the mid-90s and 2000, but it stalled in early 2000.



Source: Bruegel estimates based on OECD. EU15 Excluding Ireland.

While significant, the effect of the Single Market on trade in goods – as well as those of overall liberalisation – has thus not been sustained enough to compensate the move to a more service-based economy. Therefore, home bias in product markets has remained stable in the last few years.

In equity markets, however, home

**BOX 2
METHODOLOGY**

This policy brief uses two indicators of home bias arrived at by comparing the share of consumption of domestic products (investment in domestic equity) in total consumption (total investment) by nationals with two benchmarks derived from two alternative definitions of (absence of) home bias.

Under the first definition, a “Frictionless Economy”, the benchmarks are constructed as follows:

Product Markets $B_1 = \frac{\text{Domestic Production}}{\text{Total OECD Production}}$

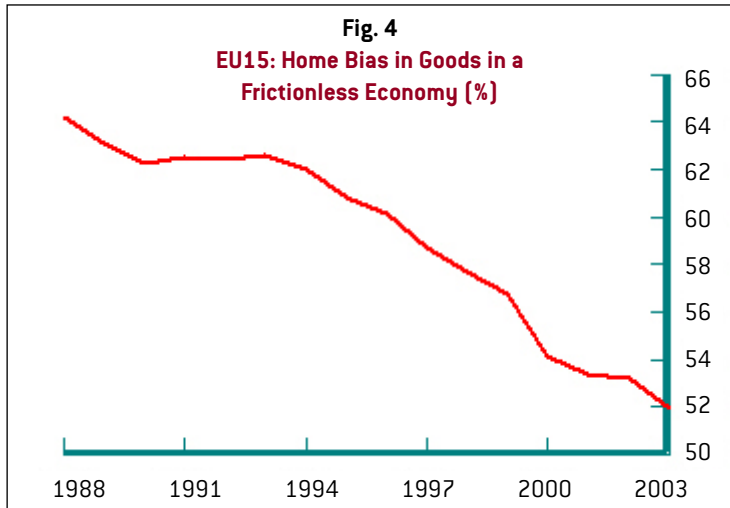
Equity Holdings $B_1 = \frac{\text{Market Capitalisation}}{\text{Total OECD Market Cap.}}$

Under the second definition, an “Integrated Economy”, using data on current trade (or investment) we estimate the impact of distance and economic size on trade. On this basis we can calculate how much a country would import from (or invest in) a partner of equal economic and geographic size. This amount is equivalent to the demand for domestic products in the absence of home bias. The second benchmark would therefore be:

Product Markets $B_2 = \frac{\text{Estimated Demand Domestic Products (no Home Bias)}}{\text{Total Domestic Demand}}$

Equity Holdings $B_2 = \frac{\text{Estimated Holdings of Domestic Equity (no Home Bias)}}{\text{Total Domestic Equity Investment}}$

See www.bruegel.org for data sources and detailed methodology.



Source: Bruegel estimates based on OECD.

bias has decreased substantially in the recent years (see Fig. 5). The preference for home companies stocks remains probably higher than what can be explained by information asymmetries, but change is without doubt under way.⁸

The evidence therefore is that (a) national borders still matter (b) their importance varies considerably from country to country and (c) while there is momentum in financial markets, it has stalled in product markets and has barely started in labour markets.

WHERE DOES HOME BIAS COME FROM?

It is difficult to disentangle the extent to which home bias is due to non-policy reasons. Consumers might have different preferences and some products are not easily tradable at long distance. Some, such as public services, are not traded at all. Moreover, if firms decide to produce in the destination markets, foreign trade is replaced by local production and, in this case, home bias in trade would produce a misleading indicator of market integration. Also, the increasing weight of services in the economy, which in principle are less tradable than goods, makes economies in general less exposed to trade.

In the case of equity holdings, information and the “familiarity” effect (i.e. the fact that investors over-invest in companies which are best known to them) play an important role. Furthermore, imperfect integration of product markets tends to weaken integration of financial markets.

This is why there is evidence of home bias even within the United States. On average the internal flow of trade within US states is three times higher than the trade between US states. US citizens also disproportionately invest in stocks of companies headquartered in their home region. However, the EU

‘The EU is not as integrated as the US. Trade between US states is two to three times higher than trade between EU member states.’

is not as integrated as the US. After controlling for size and distance, trade between US states is still two to three times higher than trade between EU member states (Wolf, 2000).

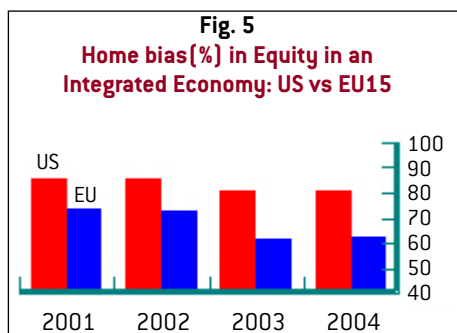
Progress in communication and information technologies allows for an increase in the tradability of goods and services and facilitates the internationalisation of production chains. Increasing trade of products that were previously not tradable and higher intra-industry trade should have boosted trade. Home bias should therefore decrease naturally as a consequence of technological progress and the increased potential for trade. However, this has not happened within the EU.

WHERE ARE THE MEMBER STATES?

The degree of home bias in product markets and equity holding varies significantly from country to country. Table 1 shows home bias in product markets and equity holdings in the EU using the integrated economy benchmark. The comparison only includes those countries for which comparable data are available. The EU15 average home bias is set as a reference.

According to this indicator, Belgium and Austria are less home biased both in equity holdings and consumption than the EU15 average. On the other end, Greece and Spain are very home-biased with reference to the EU15 average in both markets.

The Nordic countries, Germany and Italy have relatively large home bias in consumption and fairly diversified portfolio holdings. In the case of Italy this could be explained by the small size of its equity market in comparison to its economic size.



Source: Bruegel estimates based on IMF CPIS, & Eurostat. EU15 excluding IE, LU, NL and PT.

⁸The latest indicators produced by the ECB show increasing integration in the equity market both by using price- and quantity-based indicators.



Finally, the two new Member States in the sample, Hungary and Czech Republic, have rapidly integrated their product markets but their equity portfolios remain largely local.

3. POLICY RECOMMENDATIONS

The SMP has removed many obstacles on the way to European integration. However, while the integration of financial markets is still making good progress, the integration of product markets shows signs of exhaustion despite the fact that the home bias measures presented in this policy brief show that it still has considerable potential.

A NEW APPROACH TO SINGLE MARKET POLICIES

In this context the review of the Single Market policies that the European Commission has recently launched is a timely initiative. The traditional approach to achieving integration through the removal of non-tariff barriers and sectoral harmonisation has manifestly lost steam. Furthermore, the economic context has substantially changed in the last twenty years and policies should adapt to a new environment. Services have increased their role in the economy, innovation has become a major driver of economic development, and technology plays a much more important role in facili-

tating outsourcing and increasing the tradability of goods and services.

The Single Market is not an idea of the past. But the strategy needs rethinking and a new impetus. The programme launched in the 1980s relied on the assumption that gains would come from economies of scale as fewer plants would produce for a bigger market. It largely downplayed market entry and the churning effect of competition. It also overlooked the possibility of outsourcing and offshoring, which were uncommon at that time. It focused on the overall effect of market unification, disregarding the potentially enabling effect of key sectors.

Internal market policies for the 21st century should focus on favouring entry and competition, facilitating the diffusion of innovation, and creating conditions for a further integration of the value chains across Europe. This is not only achieved through horizontal policies but also through policies targeted at those sectors which help reduce trade costs and increase tradability. Some key examples in this respect are transport, infrastructure, banking and retail trade.

REDUCE ASYMMETRIES

Reducing market integration asymmetries both within and across countries should also be a clear objective in order to enhance the efficiency of macroeconomic policies. Within the euro area, exchange rates and interest rates are no longer available to tackle the consequences of asymmetric shocks. Therefore, in order to make sure that monetary policy responds effectively to the needs of the economy it is important that countries make progress in the process of integration. A single currency cannot deliver without a single market.

Insufficient integration may also hinder further market reforms. A country introducing reforms in a specific product market might achieve lower prices but also higher real interest rates, since monetary policy is not likely to respond to changes in one country. This would increase the cost of capital and would therefore mitigate the potential impact of reforms. The fact that price levels in the euro area have not converged since the end of the nineties might be a reflection of this phenomenon.

Asymmetries within countries can also involve risks, especially when product markets are more open than financial markets. For example, Hungary and the Czech Republic are relatively open to trade, but hold most of their equity wealth in domestic assets. This makes their economies especially vulnerable to shocks in their product markets. A loss in competitiveness of their domestic industry would be immediately translated into their financial markets, increasing the effect of the shock in the country's wealth. Nowadays, equity markets in new member states, although rapidly growing,

'The Single Market strategy needs rethinking and a new impetus.'

Table 1		HOME BIAS IN EQUITY HOLDINGS		
		LOW	MEDIUM	HIGH
HOME BIAS IN PRODUCT MARKETS	LOW	AT, BE		
	MEDIUM	DE, SE	UK, DK	HU, CZ
	HIGH	IT	FI, FR	GR, ES

Source: Bruegel estimates based on OECD, IMF CPIS, & Eurostat.



are underdeveloped and quoted equity is neither an important source of funding for firms nor an important savings instrument. Therefore, the impact of a shock on wealth would be limited at present. However, the pattern of equity holding needs to transform as financial wealth develops in the new member states.

FOSTERING REFORM

Recent economic analysis emphasises the complementarity between reforms. It suggests that reforming product markets facilitates reforms in labour markets⁹ and reduces home bias in equity holdings¹⁰. Liberalising product markets reduces the rents enjoyed by firms and therefore creates pressure for the introduction of more flexibility in labour markets. Equally, more competition makes profits more volatile and increases the need for a more diversified portfolio in order to hedge the higher risk. Thus, the slow down of product market reforms has direct conse-

quences for the reform of other markets.

However, reforms in the product market might also be hindered in anticipation of the potential effects in other markets: This was for example the case of the contro-

'Financial integration can not continue advancing if there is no progress on other fronts.'

versial Services Directive where the possible effects on labour markets played an important role on its watering down.

In order to fully exploit the syner-

gies between financial, product and labour market reforms, such reforms need to take into account the links between the three markets. They must also tackle simultaneously all affected markets, without expecting that reform in one market will automatically leverage reform in the others.

The current momentum of financial integration and reform could certainly help reform in other fields. But financial integration can hardly continue advancing if there is no progress in product and labour markets. The current imbalances in the progress of integration make the whole process fragile and undermines the ability of the EU to make the most of one of its greatest achievements – the Single Market.

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⁹See Blanchard and Giavazzi, 2003.

¹⁰See Obstfeld and Rogoff, 2000

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