The debate about the impact of trade on the labour market has generally focused on the 'between-industry' effect of trade. Yet, trade may also have a significant 'within-industry' impact on productive structures. The intensification of trade raises labour productivity, especially when it is with poor countries. Trade also affects skills somewhat. The consequences of globalisation are therefore widely spread, modifying companies’ production modes and pushing them to increase skill levels, as well as making labour more productive.

The traditional theory of international trade stipulates that trade with low-labour cost countries induces a fall in the relative price of goods intensive in unskilled labour. This should lead to a fall in the real wages of relatively unskilled workers, in developed countries. Testing such a prediction appears a priori to be simple, at least for countries where the minimum wage is very low. In practice, it has led to heated debate.

This possibly explains the success of pragmatic calculations, like that of the factor content of trade: the impact of trade on employment is evaluated as the balance of jobs (direct or indirect) corresponding to export sales, and the jobs which would have been created had imported goods been produced domestically. Depending on the suppositions made, the employment content of trade varies, sometimes significantly. Yet, the net balance of trade in terms of jobs is limited. Can it therefore be concluded that there is no link between the rise in unemployment in Europe and the emergence of new competitors? This method is insufficient as it can only be applied rigorously if very strong assumptions are made. The principle problem lies with calculating the equivalence of imports in domestic jobs.

Indeed, labour productivity varies considerably from one firm to another, even within a given industrial sector. Hence, a rise in imports does not affect all firms similarly. Firms with the lowest productivity are those most likely to be pushed out by extra imports, while a rise in exports should primarily benefit the most productive firms. Taking this into account can modify considerably the estimates of the employment trade balance.

By profoundly modifying the productive structure of industries, trade may have a greater impact on jobs than suggested by standard factor content evaluations.

Furthermore, foreign goods are different from domestic products. Given very marked differences in the rates of return on factors, North-South trade should lead to a complete specialisation within sectors: Northern countries abandon all production requiring mainly unskilled labour. According to Adrian Wood, this hypothesis of non-competing imports implies a radically different evaluation of the factor content of trade, which translates into a major rise in inequality.

It is difficult to judge the scale of such effects. The common factor of both these phenomena is that they may alter productive structures, and hence affect employment significantly. One way of
verifying this is to ask whether the intensity of trade has an influence on productivity and on labour skills. Does greater competition, brought about by trade, modify production conditions, or not?

To answer this question, econometric estimates were carried out on cross-sectional, sectoral data relating to medium term variations in the United States, Germany and France, using the most disaggregated, sectoral data possible. The results were similar for the three countries and can be summarised as follows.

According to our estimates, trade indeed has a slight impact on the average skill level of labour. A 1 percentage point rise in the penetration rate of imports is accompanied by a 0.4% rise in the ratio of skilled to unskilled employees.

But the main result of our estimations concerns the impact of trade on apparent labour productivity. A 1 percentage point rise in a sector’s import penetration rate induces a 0.7% rise in apparent labour productivity if imports come from a rich country, and 1.3% if they come from a poor country. This positive impact of imports on productivity can be explained for several reasons.

First, trade leads to a tougher selection of firms within a sector, favouring the most efficient and penalising the least productive. It raises average productivity by definition. Furthermore, the weakening of a certain number of firms often induces restructuring, which means that economies of scale can be better exploited, and productivity improved.

Second, trade is likely to boost overall competitiveness in an industry by penalising weak firms and rewarding strong ones.

In addition, by destabilising set positions, foreign competition reinforces firms’ incentives to innovate, be it in processes and hence costs, or in new products and hence new markets, the latter providing firms temporary shelter from competition.

Lastly, the specific impact of imports from ‘poor’ countries could be linked to low labour costs. As noted above, this makes them very competitive in unskilled-labour-intensive goods, in which labour productivity is relatively weak. The result is a total specialisation in trade, as rich countries completely withdraw from these areas. This in turn leads to a rise of average productivity in these countries.

What about industry as a whole? Productivity gains are made up of: 1) gains achieved within different sectors (the ‘within-industry’ effect), and 2) those resulting from variations in the relative weight of sectors, whose average productivity is not the same (the ‘between-industry’ effect).

Apparent labour productivity rose by 51% in French industry, from 1977 to 1993. A breakdown of this figure indicates that only 6.1% of these gains were ‘between-industry’ in nature. Econometric analysis has been used to evaluate the contribution of other factors. While ‘exogenous’ technical progress accounts for half of these total labour productivity gains, 15% of the gains stem from rising value added, and fully 25% are due to a variation of the import penetration rate, of which approximately 10% follows from trade with rich countries and about 15% from trade with poor countries.

Similar calculations indicate that the effect of trade on the average skill level has been minor: whereas the share of skilled labour in total employment increased by 2.6 percentage points in French industry, foreign trade accounts for only 0.7 points. The rise in imports has thus slightly contributed to the rise in the average skill level, and part of the acceleration in productivity gains linked to trade no doubt stems from this.

The links between employment and labour productivity are complex and go beyond the scope of this study. However, it seems highly likely that such modifications in production conditions have had a significant impact on employment.

Jobs may be affected by both technical change and trade, progressing together, rather than by just the former or the latter.

Until recently, the debate over the origins of inequalities between skill levels has opposed the view that technical progress has been unfavourable to less-skilled workers against the view which holds that certain developing countries have integrated the world market in an excessively rapid and uncontrollable way. The results of our research could reconcile the two positions, as they suggest that trade constitutes an indicator and a prime factor in the modification of firms’ environments. In France, Germany, and the United States, there has clearly been a link between the import penetration rate and the rise in productivity. In this sense, the globalisation of the world economy, which is not just limited to the emerging countries, certainly plays an active role in the evolution of labour markets.

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For further information see:


RESEARCH SUMMARY

Structural Asymmetries between European Countries

A year before the start of EMU, there is still no agreement on the state of convergence of European economies, nor on the scale of the costs and benefits of monetary union. Yet, there is a consensus on the crucial role that the degree of asymmetries between countries will play. An assessment of the evolution of asymmetries since the mid-seventies is provided here. The aim is to give evidence of increasing integration in Europe, that should lower these asymmetries, and hence the costs of monetary union.

Optimal Currency Area Theory\(^1\) suggests that countries gathering in a monetary union will face adjustment costs due to differences in their economic structure. The more similar economic structures are, the less these costs will be. The usual practice for measuring (potential) structural similarities is as follows: first, the macroeconomic shocks (such as demand and supply shocks) which the countries in question face over a certain period of time are measured, and second the correlation coefficient between two countries’ series of shocks is computed, a high correlation coefficient indicating a high degree of symmetry in economic structures.

This approach assumes stable correlation coefficients over the given sample period, which in turn is based on two strong assumptions. First, there has been no evolution in the structure of European economies over the last thirty years. Second, no extraordinary event has taken place over the period (e.g.: German reunification is assumed to have only had a temporary impact).

All this is very unlikely. German reunification must have significantly disturbed the relationships between Germany and its European partners. At the same time, the ERM, the Single Market Act and other reforms must have (at least) speeded up and deepened the process of European integration. A quick look at the volatility of GDP growth rates between European economies confirms this (see Table).

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<td>EU14</td>
<td>1.90</td>
<td>1.98</td>
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Source: Calculations based on OECD data

In short, there is no reason why the above-mentioned correlation coefficient should be constant over the last 25 years.

This research project uses a sophisticated econometric technique to measure the evolving symmetries between European economies, while taking into account structural changes. First, supply and demand shocks are estimated using VAR analysis (see Bayoumi and Eichengreen, 1996). Then a time-varying correlation coefficient between two countries’ series of shocks is estimated with the Kalman filter. The graph shows clearly convergence in the 1970s and 1980s, but also a noticeable end to this as of the late 1980s.

More generally, the results are in line with previous findings which point to increasing integration among the ‘core’ countries (France, Belgium, Austria and the Netherlands) with Germany. But this analysis goes beyond such simple evidence in several ways. For supply shocks, the whole of Europe (excluding the UK and Greece), displays a pattern of disturbances increasingly similar to Germany’s, up to a point where it reaches the same degree of similarity as the so-called core countries do with Germany. From this point of view, the notion of a group of ‘core’ countries does not make sense any more.

Yet, the project also shows that the direction of the integration process has always focused on Germany. This work provides no evidence for the convergence of each European country’s shocks towards the so-called ‘core’. The ‘core’ is not an attractive force for the rest of the European Union, including Germany. Hence, there is a strong asymmetry in the way European economies have been converging.

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FOR FURTHER INFORMATION SEE:

• "SYMMETRIE DES CHOCS EN UNION EUROPEENNE : UNE ANALYSE DYNAMIQUE", LAURENCE BOOZE, ECONOMIE INTERNATIONALE, NO. 70, 2ND QUARTER 1997.


Debt Deflation in France, Japan and the UK

The theory of debt deflation was first formulated by Fisher in 1933 to explain the vicious circle between the fall in prices, the rise in the perceived cost of debt and the decrease of demand which further depresses prices. The debt deflation hypothesis is often used to account for the length and depth of the early-90s recession in many OECD countries.

The goal of our research is to test whether debt deflation has taken place in France, the UK and Japan, all of which experienced a dramatic increase in debt ratios during the 1980s, followed by an important adjustment in the first part of the 1990s. In particular, the collapse of assets prices (stocks and real estate), after the 1980s boom, and the high level of real interest rates might have forced agents to reduce their debt, by reducing expenditure. This debt adjustment process could result either from a fall of the debt ratio targeted by non-financial agents or from a constraint imposed by lenders.

The study proceeds into two steps. First, using cointegration analysis, we estimated long term relationships between the debt ratios of households and firms and the key variables of the debt deflation process (real interest rates, real estate prices and stock prices). The cointegration relationships obtained are assumed to characterise target levels for non-financial agents’ debt ratios. It is then considered that there is ‘debt overhang’ when observed debt ratios are above these targets. Second, we test the impact of this indicator of debt overhang on household and firm expenditure.

Household debt ratios and hence ‘debt overhang’ are driven by asset prices and real interest rates.

It was found that in the long run the debt ratios of households are driven by asset prices (housing prices in France and the UK, real estate and stock prices in Japan). This means that periods of rapid falls in asset prices would probably lead to debt overhang, because the amount of outstanding debt is slow to adjust. This phenomenon is very likely to have occurred during the last slowdown in the UK and in Japan. In both countries, the dramatic fall of asset prices around 1990 led to a fall in the targeted debt ratio with respect to which the actual household indebtedness suddenly became excessive. For France, there is no overwhelming evidence that household over-indebtedness took place in the early 1990s, which leaves unexplained the rise of the household savings rate which contributed to the 1993 slowdown.

The debt ratio of firms is driven by the real interest rates in the three countries. In Japan, we find that real estate prices are the major determinant of firms’ indebtedness, which is consistent with the collateral role played by real estate in bank lending. In the UK, the rise of real interest rates at the beginning of the 1990s led to debt overhang for firms, which probably worsened the slowdown and moderated the dynamism of investment during the recovery. In France, the historically high level of real interest rates has also translated into debt overhang for companies, over the last 5 years. This situation results from the high levels of indebtedness reached at the end of the 1980s, when real interest rates were increasing. We have found that the persistent high level of real interest rates, due to falling inflation, is still a constraint on the borrowing behaviour of firms both in the UK and in France. In Japan, quantitative restrictions imposed on bank lending in the early 1990s probably hastened the downward adjustment of debt ratios, delaying firms debt overhang. However, as real estate prices kept falling, Japanese firms eventually experienced excessive debt ratios from 1993 onwards. This might contribute to the weakness of investment in the current cycle.

Debt overhang appears to put downward pressure on investment and expenditure.

Finally, whether debt overhang has put downward pressure on household and firm expenditure is formally tested. Granger-causality tests do not reject this hypothesis in several cases. Debt overhang has reduced business investment in France, in the UK, and, to a lesser extent, in Japan. Likewise, Japanese households seem to have reduced housing investment because of perceived over-indebtedness.

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THE CEPHI RESEARCH PROGRAMME FOR 1998

The following is a short summary of the CEPHI's research programme as it was presented to the Centre's Board of Directors, the 29 January 1998. Certain amendments may subsequently be incorporated.

The work programme addresses six major themes, as follows:

The greater international openness of economies and labour markets

Greater international openness, be it in terms of globalisation or regional integration, is a key issue for labour markets. The CEPHI's work in this area will look primarily at the effects of European Economic and Monetary Union, and the implications labour market asymmetries have for the Union's macroeconomic and employment policies. Further research will also be conducted on the linkages between trade and employment. This will include constructing simulations using a general equilibrium model for the United States, the United Kingdom and France. Lastly, a two-country model is to be developed to examine North-South interdependence.

International capital and financial markets

Three principal areas are to be examined. First, exchange rate developments will be tackled mainly from the perspective of the Euro's future international role, and the fixing of parities between the major international currencies, given the heterogeneity of exchange rate expectations and the impact of exchange rates on macroeconomic equilibria. Second, the functioning of national financial markets will be analysed in the light of growing financial and monetary interdependence, and on the basis of EMU's impact, given asymmetries in European financial markets. The crisis of the Asian banks is also to be examined. Lastly, research will be conducted into the international, financial consequences of the OECD's aging population and how savings may be transferred from 'older' to 'younger' countries via pension funds, in order to ensure the viability of pension schemes and to maintain global macroeconomic equilibria.

Emerging and transition economies

These economies have long been studied by the Centre, though an effort is to be made to pay more attention to emerging countries in Latin America. More specifically, the topics for study include: the restructuring and finance of Russian companies and industrial policy; the dangers of hyperinflation in the Balkans and the Newly Independent States; Russian foreign trade; the security and consolidation of the State in the Community of Independent States; the restructuring of state enterprises in China; China and the Asian crisis; the forms of regional integration in the Americas, and emerging African economies.

Integration and regional convergence in Europe

The matter of European regional integration will be looked at from two points of view. The first examines how deepening market integration may lead to a polarisation of activity across regions, and asks what policies may be implemented to encourage convergence. The aim will be to draw on research into convergence clubs between countries, and to apply this to European regions, as well as to study the role of infrastructural development as a cause for convergence or divergence. The second area of this project focuses on the consequences of European integration for its neighbours, in particular for the Mediterranean countries and those of Central and Eastern Europe (the CEECs). This work will be especially orientated to clarifying the trade relationships between the EU and these countries.

International trade and competitiveness

This over-arching theme groups together a number of areas in which the CEPHI plans to pursue its research. Foremost among these is the CEPHI's international competitiveness report, which will look at the competitiveness implications of the devaluation of Asian currencies, as well as more general trends in national competitiveness that are to be highlighted using various indicators developed by the Centre. France's technological specialisation is also analysed in comparison with other major industrialised countries. The work will be based largely on assessments of trade flows, at a detailed level. A third subject for study is the international competitiveness in services, whose trade has been opened-up by multilateral negotiations under the auspices of the WTO. Particularly attention will be paid to transportation and telecommunications. Lastly, the Centre will complete its current research into the linkages between trade and foreign direct investment, notably in the case of Japan.

International information

This heading essentially covers a number of permanent activities undertaken by the Centre. These include primarily the development of the CHELEM database. Apart from updating its data (figures up to 1997 should be available at the end of 1998) the foreign trade of the new East European economies are to be included in the trade database; 1995 will become the new base year for PPP GDP statistics, and the balance of payments database will be rendered compatible with the new IMF classification. Secondly, the CEPHI's annual publication on the world economy (Economie mondiale 1999) is to be printed in the autumn. This is a short, educational book aimed at a wider public than most of the Centre's publications.
Recent Publications

**ÉCONOMIE INTERNATIONALE, QUARTERLY**

- No 71, 3rd Quarter 1997, Special Issue: Mondialisation, Convergence et Inégalités
  - "Pour une approche individualiste de la convergence" 
    F. Bourguignon
  - "La distribution passée et future du revenu mondial" 
    L. Prichett
  - "Vers une convergence globale ou locale" 
    A. Desdoigts
  - "L'agglomération dans l'économie mondiale" 
    G. I. P. Ottaviano, D. Puga
  - "Inégalités et emplois : effet de redistribution lié à la structure familiale" 
    J.-M. Burniaux
  - "L'ouverture, catalyseur de la croissance" 
    L. Fontagné, J.-L. Guérin
  - "Progrès technique, commerce international et inégalités" 
    O. Cortes, S. Jean
  - "Prévisions de croissance de l'OCDE" 
    S. Guichard
  - "Comportements financiers des fonds de pension dans les pays de l'OCDE" 
    N. El Mekkaoui
  - "Quel avenir pour l'intégration entre l'Union européenne et les Pecos" 
    A. Henriot, A. Inotai

- No 70, 2nd Quarter 1997.
  - "Synergie des choix en Union Européenne : une analyse dynamique" 
    L. Boone
  - "Convergence et politiques régionales en Europe" 
    P. Martin
  - "Optimisation des choix en Union Européenne" 
    M. Delapierre, C. Milelli

Price: FF 117 per issue, 
FF 440 annual subscription in Europe, and FF 465 outside Europe. Publisher: la Documentation française

**LA LETTRE DU CEPII, MONTHLY**

- "Japon : les limites d'une gestion macrömécanique de la crise financière" 
  S. Guichard
  No 163, December 1997

- "L'Union européenne et ses voisins de l'Est et du Sud" 
  A. Chevallier, F. Lemoine, L. Nayman
  No 162, November 1997

- "La crise financière en Asie" 
  M. Aglietta, Agnès Bénassy-Quéré, L. Cadioni, J. Sgard
  No 161, October 1997

- "Commerce extérieur, productivité et emploi" 
  O. Cortes, S. Jean
  No 160, September 1997

Price: FF 310 outside France. 
Publisher: la Documentation française

**Books, by CEPII Researchers**

**L'Europe entre marché unique et monnaie unique, perspectives françaises et européennes** 
Jointly edited by P. Jacquet of IFRI and J. Pisani-Ferry, former director of the CEPII
122 p., Cahier de l'IFRI No 20, FF 65.

**Europe de l'Est, la transition économique** 
J. Sgard
128 p., eds. Flammarion, FF 59.

**Macroéconomie Internationale** 
M. Aglietta
This is a textbook on international economics.

**Régulation et crises du capitalisme** 
M. Aglietta
This book has been re-edited with a substantial postface.
486 p., coll. Opes, Odile Jacob, FF 80.

**Économie mondiale 1998** 
A. Chevallier, D. Pinory (eds.)
128 p., coll. Respènes, La Découverte, FF 49.
This is an annual CEPII publication outlining major events in the world economy for a wide readership.

**CEPII Working Papers**

- "How Foreign Direct Investment Affects International Trade and Competitiveness: an Empirical Assessment" 
  L. Fontagné, M. Pajot

- "Why the Euro will be Strong: an Approach Based on Equilibrium Exchange Rates" 
  M. Aglietta, C. Baulant, V. Coudert
  No 97-18, December 1997.

- "Les fonds structurés en Europe" 
  L. Nayman
  No 97-17, November 1997.

- "Cycles de production industrielle : une analyse historique dans le domaine des fréquences" 
  P. Villa
  No 97-16, November 1997.

- "International and External Policy Coordination: a Dynamic Analysis" 
  F. Capoën, P. Villa

- "Optimal Pegs for Asian Currencies" 
  A. Bénassy-Quéré
  No 97-14, October 1997.
Events

SEMINARS AND MEETINGS

- Presentation of the 1997 World Bank Development Report
  U. Dadush (World Bank), A. Chevallier (discussant - CEPII)
  8 September

- Potential Growth
  P. Artus (Caisse des Dépôts et Consignations), G. CETE (Banque de France), H. Delessey (The French Post Office)
  Presentation of the special issue of *Économie Internationale*, No 9, 1st Quarter 1997, dedicated to potential growth
  17 September

- The Paths to the Single Currency as Experienced by Companies
  P. Bocion (PSA Peugeot Citroën), F. Janny (Saint-Gobain)
  3 October

- European Monetary Policy and Monetary Union
  P. Moutot (Head of the 'Stage III' Division, EMI), M. Aglietta (CEPII)
  24 October

- Large Emerging Markets: The Economic Outlook and Company Strategies
  C. de Boissieu (Université de Paris I), A. Chevallier (CEPII), M. Fouquin (CEPII), D. Turcq
  (McKinsey, Paris), P. Bourrier (Alcoa-Allanur), G. Gastaut (Renault), R. Salmon (L'Oréal)
  18 November

- Presentation of the EBRD Report
  'The Transition: Company Performance and Economic Growth'
  P. Aghion (EBRD), H.-P. Lankes (EBRD), J. Sgard (discussant - CEPII)
  23 November

- The World Economic Outlook in the Light of the Asian Crisis
  M. Hadjimichael (IMF), M. Fouquin (CEPII)
  22 December

CONFERENCES

- The CEPII and *Le Monde* held a Conference at the French National Assembly on the 6th November 1997, entitled 'Europe and the Euro: Strategies for Growth and Employment'. The main speakers included: M. Aglietta (CEPII), J.-L. Blanco (Deputy), C. de Boissieu (Uni. of Paris I), F. Brun (Uni. Commerciale Luigi Bocconi), D. Cohen (CEPREMAP), E. Cohen (CNRS-FNRS), G. Fuchs (Deputy), M. Fouquin (CEPII), D. Gros (CEPS), A. Iulianer (European Commission), E. Izraelevicz (*Le Monde*), J. von Hagen (Uni. of Bonn), J. Martin (OECD), J. Pisani-Ferry (Min. of Economics and Finance), A. Sapir (IEE, advisor DGI), P. Sisogne (OFCE), L. Soete (Maistracht Economic Research). Addresses were also made by the Minister of Economics and Finance D. Strauss-Kahn, by L. Fabius (Speaker of the National Assembly) and by J. Lang (Chairman of the National Assembly's Foreign Affairs Committee).
  The proceedings of the conference will be published by the Assemblée Nationale in early 1998.

News in Brief

- Jean-Claude Berthélemy has been appointed as director of the CEPII, as of the 1st January 1998.
  Professor of economics at the University of Paris I, his previous post was as Head of the OECD Development Centre's 'Developing Countries' National Policies' Division.
  A specialist in economic growth and international finance, Prof. Berthélemy has also acted as a consultant for various international organisations.
  He is a member of the Scientific Committee of the *Revue Economique* and the Editorial Board of the *Revue d'Économie du Développement*. He is also a member of the steering committee of the French Association of Economic Sciences.

- Michel Albert (Member of the *Banque de France's* Monetary Policy Council), Daniel Cohen (Professor at the Ecole Normale Supérieure, and CEPREMAP), Jacques Freyssinet (Director of IRES), and Eric Izraelevicz (*Le Monde*) have joined the CEPII's Board of Directors.

- Michel Aglietta, Scientific Advisor to the CEPII, was appointed as a member of the French Prime Minister's Council of Economic Advisors (*Conseil d'analyse économique*) in July 1997.

- Phillippe Martin has left the CEPII as a Associated Researcher, and Véronique Ardouin's secondment from the INSEE has ended. Olivier Cortes has taken a year's sabbatical leave from the CEPII. We wish them all the best with their future plans.

Forthcoming

- The CEPII will be celebrating its 20th anniversary in the autumn of 1998. The Centre's correspondents will be informed of the events planned to mark the occasion.
- The CEPII's first international competitiveness report, providing an analysis of national competitive situations, is set to be released in the second quarter of 1998.


- The new version of the CHELEM database will be available as of the 2nd quarter 1998. Trade data will run to 1996 and GDP figures for the OECD countries to 1997. A new, Windows-compatible CDROM is being produced, for release in early 1999 (see *The CEPII Research Programme*, page 6).
**CHELEM DATABASE**

*French and German Trade with Neighbouring Countries*

Geographical and economic distance play an important role in trade relations, as shown by gravity models. So do historical relationships, aid and political strategies which shape the trade environment, as do corporate strategies.

Most export industries in the Mediterranean countries and in the CEECs have bloomed in response to the division of labour devised by European firms, especially German and French companies, though their impact has been varied.

German firms were already present in the CEECs before 1990, and quickly expanded their activities in the region, targeting it both as a production base and as a market. Thus, German production of textiles and clothing, and (to a certain extent) of electrical appliances has been mainly transferred to the Czech Republic, Hungary, and Poland. However, the direction of German trade towards eastern Europe has not entailed a retrenchment of trade relations between Germany and its longstanding Mediterranean partners, namely Turkey and Tunisia. The relative market share of some eastern countries in German manufacturing imports is very high (see Graph); Poland’s share in German imports is thus four times its average share in OECD imports. German trade with countries such as Hungary and Poland is also above the ‘natural’ level predicted by gravity models.

The share\* of neighbouring countries in French and German manufacturing imports compared to their share in OECD imports, in 1995

```
France                      Czech and Slovak Rep              Germany
Turkey                      6
Poland
Hungary
Romania
Morocco
Tunisia
Algeria
Egypt
Bulgaria

\*I_j = \frac{M_j}{M_{OECD}} , i: France or Germany, j: neighbouring country, M : imports
```

The same holds true for French trade with Morocco and Tunisia, though trade between France and the CEECs stands below its potential level. French firms have been slow in seizing the trade and investment opportunities in the CEECs, while Mediterranean countries have doubled their share in French imports of manufactured products in the last ten years, the CEECs have not increased theirs. Generally speaking, French firms use neighbouring countries more as an outlet for their exports than as a production base.

*Agnès Chevallier, Laurence Nayman  
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The CHELEM (Harmonised Accounts on Trade and the World Economy) database provides harmonised, long-term data on trade, economic growth and population, stretching back to 1967 and to 1960 for some series. The database breaks down the global economy into 53 countries/geographic regions, and 71 product categories. Also included are data on PPPs and exchange rates. The database is bilingual (French-English), ‘user friendly’, and is available on CD-ROM.

For further information please contact Colette Herzog at the CEPII, tel: (33) 1 53 68 55 27.

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**CEPII**

**CENTRE D'ETUDES PROSPECTIVES ET D'INFORMATIONS INTERNATIONALES**

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