The main crises in recent years are examined here, using comprehensive field-surveys, in 1998 and 1999, in which more than 150 actors or close witnesses were interviewed, including: members of local Central Banks, Ministers of Finance, commercial banks, enterprises, think-tanks and universities, the IMF and the World Bank, the US administration (Treasury and Fed). This work has made the analysis of the domestic dynamics of crises much more precise, an area often neglected both on the spot, by international crisis managers, and in the academic agenda on an ex post basis.

Strong emphasis was put on the systemic consequences of the liberalisation of short term capital movements. This was one of the main institutional reforms of the 1990s, allowing for the "invention of emerging markets". Their impact is analysed both in the years before the crises (large capital inflows, speculative bubbles, etc) and on the short term dynamics of financial collapse. In particular, the study stresses the role played by the refusal to consider any temporary control on capital outflows. This was a key principle of IMF strategies in Asia, which often subsequently collapsed.

Historically, bankruptcy procedures have been used to settle payment defaults.

Two approaches to intervening in crisis-stricken economies - both valid at the national and international levels - are compared, namely that based on the action of a lender-of-last-resort or bankruptcy procedures (be they in a judicial form or more ad hoc). The former operates from "within the market" and aims at preserving the continuity of commerce and payments. The latter, in contrast, relies upon a controlled interruption of transactions: it actually takes the distressed agent out of the market and re-coordinates the positions of stakeholders - first of all creditors - "around the table". The aim of this latter approach is to reach a negotiated exit from the crisis, relying upon an exchange of policy commitments against financial concessions. It involves an agreement on the sharing of losses incurred during the crisis.

A historical analysis of sovereign debt renegotiations, which structured the development of conditionality, then shows that since the early 20th century, collective action on crises has been de
Since the mid-1990s, a lender-of-last-resort approach for handling crises has emerged.

The book shows that this change of paradigm has had a large impact on the rules of interaction between the Fund and member-countries as well as on conditionality: i.e., on the very core of multilateral collective action. This is exemplified above all by the "intervention doctrine" of the new Contingent Credit Line (CCL). It is analysed and criticised as the most innovative as well as least viable instrument ever invented by the Fund: it formalises a relationship wholly at odds with the past experience of stand-by agreements, and which goes beyond the most basic principles of multilateral action.

The intellectual and practical failures of this recent, lender-of-last-resort approach explain why off-market, bankruptcy-type strategies will most probably regain some ground in the future. The main issues now facing the "international architecture" are to design new forms for the latter, which cannot be drawn directly from past experiences. A much-discussed direction is Anne Krueger's proposition for an international bankruptcy procedure for sovereign states. While very elegant in theoretical terms, this relies on a key element which is directly derived from private bankruptcies, since it requires the coordination of all classes of creditors and their agreement on a restructuring strategy: it would necessitate the existence of a legal authority superior to private legal contracts which can nullify these and impose a common decision-making procedure. In other words, the optimal solution to default would only be reached if rules of collective action are imposed upon investors and debtors; the organisation responsible for handling such critical infringements of contracts would thus mimic national, commercial courts. It would be a multilateral institution, more or less attached to the IMF. This proposition has received a lukewarm welcome at best: debtor countries and, more vocally, private investors have repeatedly criticised this approach and defended an alternative, softer one. These critics assume that the generalisation of so-called Collective Action Clauses, within each debt contract, would be sufficient to deal with possible defaults. In other words, no superior statutory authority would be necessary. While these propositions imply an important alternative in terms of international crisis management, they also imply diverging views as regards the interaction between private interest and public intervention, at the international level, as well as between the national and multilateral regulation of markets.

The deepening of international commerce requires a re-definition and strengthening of State institutions at an international level.

Both strategies are designed, first of all, to address sovereign debt crises in terms of liquidity and solvency. In a world where private agents and private contracts are more and more widely traded, such multilateral instruments become less and less adequate in addressing crises. Paradoxically, as the role of private agents increases, the process of liberalisation gives greater importance to national institutions in charge of market discipline and contract enforcement. The regulation of international capital markets thus becomes more dependant upon national-based, and thus more fragmented institutional infrastructures than was the case when everything could be settled within the rather simple framework of London Club and IMF agreements. This is yet another example of why liberalisation and globalisation do not call for a "withdrawal" of State institutions, but rather their re-definition and often their strengthening, so as to allow them to participate in international agreements to protect the integrity of the international market and address systemic crises.

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The size and sustainability of the US current account deficit has become one of the most important issues of the present macroeconomic policy debate. The worry is that if the deficit does not move back closer to balance, or keeps widening, then US external liabilities will account for a growing share of world portfolios. At some point, investors could become unwilling to hold US debt and start selling it. This will translate into a large adjustment in the current account and a fall in the external value of the dollar, leading possibly to a substantial dislocation in the world economy and disruptions in financial markets.

The whole issue of current account sustainability boils down to the question of how high a deficit a country can sustain without incurring a drastic change in economic policy and/or an abrupt exchange rate adjustment. At least two approaches for measuring the sustainable level of external balance can be envisaged. The first assesses the intertemporal solvency of a country, which depends not only on the stock of foreign debt, but on several structural factors. For example, higher trend GDP growth will make it easier to service external debt, raising the level of sustainable external deficit. Moreover, the composition of the capital flows financing the deficit is essential: higher equity financing would in principle support deficit financing. Simple calculations based on reasonable assumptions on the US economy arrive at the tentative conclusion that a current account of around 3.5% of GDP is indeed nowadays sustainable.

Despite its size, the US current account deficit does appear to be sustainable.

The second approach takes into account the role of the business cycle. For example, higher growth relative to its main trade partners boosts a country’s imports, leading to a deterioration of the external balance. It is possible, using standard econometric methodologies, to decompose the external balance into its cyclical component (the different timings of the business cycle or the exchange rate appreciation) as opposed to structural factors, such as an excessively expansionary fiscal policy. Empirical evidence shows that most of the current external imbalance is due to temporary factors, namely very high US growth compared to that of its main trading partners. Therefore, the deficit should be reabsorbed quite smoothly when growth in Europe and Japan picks up.

An alternative way to assess the probability of a sudden reversal of the US deficit is to try to understand the basic economic mechanisms that lead to it. Simulations have been carried out using the CEPII’s multicity model MARMOTTE. The basic question asked is whether it is possible to replicate the most important features of the US business cycle of recent years (the investment boom, the deepening of the deficit and the massive real appreciation of the dollar) by means of simple shocks. The aim of the exercise is twofold. It seeks to

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In 2001, the US current account deficit stood at 4.1% of GDP, down from 4.5% in 2000, but far above the 1.5% of 1995. According to some forecasts it could reach 5% by the end of 2003. The rapid growth of the US economy relative to Europe and Japan, coupled with a strong dollar between 1995 and 2001 have been the main factors contributing to the deficit. The domestic counterpart to this deficit was the investment boom which occurred between 1996 and 2000, and the contemporaneous drop in private agents’ savings, fuelled by expectations of massive productivity gains.

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(1) More details about the methodology employed and a comprehensive list of references can be found in the Chapter 5 of the Fall Report prepared by the European Forecasting Network for the European Commission. This report is available on the CEPII website at «www.cepii.fr/anglaisgraph/publications/efn/efnfall2002/efnfall2002.htm». 

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Figure 1: US Current Account Deficit and Public and Private Deficits/Surpluses, as a percentage of GDP

interpret the past by identifying the most important shocks. It tries to give some indications of the future developments of the current account and the real exchange rate. In particular the goal is to assess the likelihood of a reversal in the current account deficit.

It is assumed that during the second half of the 1990s, two kinds of shock hit the US economy: a positive, permanent productivity shock and a reduction in the risk premium on US assets. The positive productivity shock led to a huge increase in investment until the end of 2000, as production factors became relatively less expensive. Households started to consume more, expecting a permanent increase in income and wealth. The rise in domestic demand, reflected in sustained GDP growth, boosted US imports and so the US current account deteriorated. This volume effect was further amplified by a price effect, arising from the real appreciation of the dollar, which followed the nominal rate. The depreciation of the euro and the yen was the direct result of the reduction of the risk premium on the US assets. This entailed huge inflows of capital to the US, as its portfolio investment became more attractive due to its relatively higher return.

In 2001, the productivity growth slowed. Firms, having accumulated too much capital, revised their investment plans downwards. This moderated GDP growth permanently and thereby imports, which stopped the deterioration of the trade balance afterwards.

From 2002 onwards, such a scenario foresees investment growing slowly due to past over-accumulation. The reversion of expectations about the risk of the US economy entails a sizeable nominal depreciation of the dollar, which appears to be now underway. The overall effect on the trade balance is a continuous, but slow reduction of the deficit. Figure 2 gives a visual idea of such adjustment.

The evidence briefly summarised here so far excludes any problems of sustainability. But it may legitimately be asked whether the US is just like any other country concerning external imbalances.

Debt levels in the US economy may well lead to significant readjustments in activity, which in turn are likely to bring down the current account deficit.

In fact, the US enjoys a unique position in the world financial architecture. Unlike any other country, all the debt stemming from its external deficit is denominated in its own currency. Therefore, US financial institutions are immune to exchange rate risks: any fall in the dollar would harm only the foreign investors who have bought US debt. More importantly, the US dollar is at the moment the only truly international currency (even though the euro is likely to challenge its status within a few years). Thus, no country is eager to let its currency fluctuate too widely against the dollar, and this should rule out too big a depreciation of the dollar in the event of a current account crisis. Also, most foreign exchange reserves held by central banks are US treasury bills, and more generally, the demand of US debt is not likely to subside in the short run, as the country is still regarded as a relatively "safe haven" for investments. Therefore, the US enjoys a sort of "soft budget constraint" vis-à-vis the rest of the world, as its debt is likely to be financed even though its imbalances appear worryingly high.

This last argument therefore reinforces the case for not worrying too much about the level of the current account deficit per se. However, it should not be forgotten that the current account is but one manifestation of the interaction of several factors. More specifically, the current US external imbalances are the result of investments that are far in excess of savings. In other words the US, and especially the private sector, is living far "beyond its means". Firms and consumers are accumulating a huge stock of debt, which they could find difficult to repay. This could trigger a widespread cut in consumption and business investment (the latter already clearly visible), with the risk of the US entering a strong recession, possibly associated with deflation. In this event, the most evident by-product would be the disappearance of the current account deficit.

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THE COMPETITIVENESS OF CHINA’S ECONOMY

Globalisation has renewed the conditions under which developing countries are integrating the world economy. China's outstanding export performance can be explained by its specialisation in assembly operations which has allowed for a rapid diversification of its exports and raised the technological level of its traded goods, since parts and components have been the main channel of technological transfers. These outward-oriented industries, carried out by foreign affiliates, coexist with traditional export sectors (ordinary trade), dominated by Chinese firms, which are lagging behind. The competitiveness of processing trade is much less vulnerable to the fluctuations of the real exchange rate than ordinary trade, and thus helped China to resist the consequences of the Asian financial crisis. After WTO accession, ordinary trade, which is subject to the normal customs regime, is expected to surge as tariff rates are cut. But if WTO accession leads to a real appreciation of the yuan, it will suffer more than processing trade from a loss of competitiveness.

The impact of WTO accession on the Chinese domestic economy, analysed using a two-region Chinese CGE model, shows that China would gain from a more efficient allocation of resources and from the elimination of MFA quotas. But these gains would be unevenly distributed across sectors and across provinces. The coastal areas, epitomised by Guangdong province, would be the main beneficiary of trade liberalisation, due to their specialisation in labour intensive goods, while inland provinces would suffer losses. WTO membership would thus enlarge regional disparities and loosen the already weak economic linkages between coastal areas and the rest of the economy.

The comparison of productivity in manufacturing industry between China and Germany provides a synthetic view on the heterogeneity of China’s industry. Labour productivity is still low in China, (around 7% of the German level) but varies considerably across branches and tends to be higher in industries which have benefited from large foreign direct investment. The study of the impact of FDI on the global factor productivity in China’s manufacturing industry suggests that it has had a positive impact on productivity growth.

This research programme has benefited from the support of the Ministry of Economy, Finance and Industry. It involves both French economists (S. Dées, S. Démurger, F. Lemoine, D. Ünal-Kesenci) and Chinese economists (Li Shantong, Ren Ruoen). Their contributions were presented at a seminar organised by the CEPII in Paris (December 12, 2003) and are published in Economie Internationale, n°92, 4rd quarter 2002.

THE IMPACT OF ALTERNATIVE POLICY RULES

The second ENEPRI workshop devoted to the comparison of multi-country models took place on 1st to 2nd July 2002, at Royaumont, outside Paris. Its goal was to analyse the effects of alternative policy rules and their effectiveness in stabilising an economy faced with adverse shocks. To this end, several macro-econometric models were simulated in a deterministic and a stochastic way.

The conference was largely oriented to evaluating the effectiveness of different sets of monetary policy rules. Their effectiveness was analysed with respect to the interest rate transmission channel, the targeted variable (a nominal variable, inflation or both) in the central bank’s rule for monetary policy, the inflation coefficient in this rule, its horizon or the role of the national versus area-wide information. For instance, V. Rossi found that the UK economy’s response to interest rate changes is likely to be more pronounced inside EMU than outside, because of its relatively rapid wage-price response. R. Fair examined the ability of various interest rate rules to dampen economic fluctuations caused by random shocks using his MC model. His main result was that rules with a coefficient on inflation less than one are effective in reducing output and price variability. J.-L. Brillet showed that the Taylor rule in his MACSIM model is effective in reducing the variability of both GDP and inflation, if uncertainty comes from real side elements. Using the NIGEM model, R. Barrell concluded that the ECB should always choose a rule combining a nominal variable and an inflation target, if it is concerned about price stability. Using a simple multi-country econometric model, S. Silviero found that the performance of a central bank that chooses the nominal interest rate to minimise a standard, quadratic loss function of area-wide inflation and output gap significantly improves, if the reaction function includes national variables, as opposed to area-wide variables.

For fiscal policy, effectiveness was analysed with respect to the multiplier effect of different discretionary fiscal policies, and also the ability of different fiscal rules in stabilising the economy. According to the MARMOTTE model, an increase in government consumption has small positive, but ephemeral, effects on production. A reduction in taxes has a more beneficial effect. Using the QUEST model, J. IntVeld obtained the same results. Moreover, when he introduced different endogenous fiscal rules, he found that expenditure based rules are more efficient than revenue (direct and indirect taxes) based rules.

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**Recent Publications**

**ECOLOGIE INTERNATIONALE, QUARTERLY**

No 89-90, 1st-2nd Quarter 2002.
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L. Fontagné, T. Mayer

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- Niveau et coût du protectionnisme européen
  P. A. Messerlin

- M'ACmaps : une mesure bilatérale et désagrégée de l'accès au marché
  A. Bouët, L. Fontagné, M. Mimouni, X. Pichot

- Commentaire sur A. Bouët et al.
  A. Bouët

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  M. Brühlhart, F. Trionfetti

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  M. Crozet, F. Trionfetti

- 'Biais domestique et concurrence des processus d'intégration dans les échanges de l'Europe du Sud-Est'
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  J. Chateau, J.-L. Guérin, F. Legros

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  4 December 2002

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  M. Aglietta (CEPII), B. Marois (HEC), H. Stordyniak (OFCE), L. Fontagné (CEPII).
  22 November 2002

- **Economic and Financial Globalisation**
  C. de Boissieu (COE), A. Bréder (DEA), M. Aglietta (CEPII), D. Pl bevor (Univ. Paris XIII, Attac), J. Fayolle (IRES), L. Fontagné (CEPII).
  18-19 November 2002

- **Economic and Financial Policies, with Applications to Trade Liberalisation Policies**
  Brussels, 7-8 November 2002
  This conference aimed at analysing the means for measuring the sustainability of EU policies, and in particular the impact of trade policy on labour markets, on the environment and on agriculture in the future new members of the EU. It also addressed issues related to the effects of trade liberalisation on women, and on income disparities between households.

- **Europe Coping with CAP Reform**
  Paris, 14 November 2002
  The meeting was hosted in collaboration with the OECD Forum 2003 team. It examined the need to reform the Common Agricultural Policy, the impact of agricultural trade liberalisation, the Doha Round, and the possibilities of reforming the policy.

- **Methodological Tools for Assessing the Sustainability Impact of EU’s Economic Policies, with Applications to Trade Liberalisation Policies**
  Brussels, 7-8 November 2002
  This conference aimed at analysing the means for measuring the sustainability of EU policies, and in particular the impact of trade policy on labour markets, on the environment and on agriculture in the future new members of the EU. It also addressed issues related to the effects of trade liberalisation on women, and on income disparities between households.

- **Fiscal and Monetary Policy for a Low-Speed Europe**
  D. Gros (CEPS), A. Bénassy-Quéré (CEPII).
  8 October 2002

- **Saudi Arabia in Transition: What Are The Consequences for the Region?**
  A. Baibous (Observatoire des pays arabes), D. Babusiaux (Institut Français du Pétrole).
  25 September 2002

- **MARMOTTE: Presentation of the Model**
  18 September 2002

- **L’Économie mondiale 2003**
  Presentation of the CEPII’s annual publication, written for a general readership.
  12 September 2002

**CONFERENCES**

- **Policy Competition and the Welfare State**
  La Hague, 29-30 November 2002
  Organised with the ENERPRI, the conference examined key issues relating to the future of welfare and social policy in Europe. Particular attention was paid to the impact of demographic ageing on pension systems, welfare policy in a monetary union, immigration, education, poverty, labour market reforms, mutual recognition, unemployment and competition policy.

- **Fiscal Discipline**
  Paris, 21 November 2002
  Organised with CDC-IXIS, this meeting examined a wide variety of issues related to fiscal discipline within Europe and within the eurozone in particular. It discussed the use of rules for policy, the functioning of institutions, the Stability Pact and the prospects of greater coordination of fiscal policy in Europe.

- **European and Financial Policies, with Applications to Trade Liberalisation Policies**
  Brussels, 7-8 November 2002
  This conference aimed at analysing the means for measuring the sustainability of EU policies, and in particular the impact of trade policy on labour markets, on the environment and on agriculture in the future new members of the EU. It also addressed issues related to the effects of trade liberalisation on women, and on income disparities between households.

- **Money and Finance in the Age of Globalisation: A Comparative Study of Europe and Asia**
  University of Waseda, Japan, 1-2 November 2002
  The 7th Franco-Japanese Economics Conference, organised with the Franco-Japanese Society for Economic Sciences. Issues discussed included: the impact of financial globalisation on the yen, the role of the yen, the mutation of Japan’s economic model after a decade of lost growth, the development of monies and currencies in the age of globalisation.

- **Welfare and the Labour Market in the EU**
  Marseille, 25-26 October 2002
  Organised with the ENERPRI, the meeting examined issues related to changes in the labour market, including ageing and retirement, unemployment, its causes and indicators, modelling the impact of changes in benefit levels and immigration. The meeting also discussed the design of public policy to deal with major problems affecting welfare systems.

**NEWS IN BRIEF**

- **Astrid du Lau d’Allemans, Secretary General of the CEPII’s Business Club, resigned from her position in December 2002.**

- **Vanessa Dagang joined the Business Club in November, to help with its organisation and administration.**

**FORTHCOMING**

- **In March, the CEPII Business Club is organising a meeting on the “Economic Consequences of European Enlargement”, with the support of CDC-IXIS Capital Markets.**

- **In April 2003, the CEPII is organi-**

- **sing a colloquium on Russia, and will also act as a “knowledge partner” to the OECD Forum 2003.**

- **A seminar is being planned in May, in conjunction with the NIESR (London), on employment skills in the knowledge economy.**

- **A major conference is also being organised with the Inter-American Development Bank, in Washington, in October 2003. It will examine the implications of the Doha Round on Latin America and the Caribbean.**
Improved market access for agricultural and industrial goods could well constitute the main area of progress for the new trade round. Four scenarios for the reduction of the tariff equivalent of ad valorem duties, specific duties, tariff quotas, prohibitions, and anti-dumping duties are built here at the level of 5,000 products, using the MIRAGE CGE database. The Baseline Scenario (A) assumes a uniform 35% reduction in the initial level of protection, spread over six years for industrial countries and ten years for developing countries. Tariff peaks (defined here as above 15% for industrial products, and over 85% for agricultural products) are assumed to remain unchanged in Scenario B, while they are evened out in Scenario C using the so-called Swiss formula, meaning that the tariff cut is proportionally higher, the higher the initial tariff level. Another scenario (D) of evening out is considered, whereby developing countries carry out more limited tariff cuts (20% for non-peak products, and a correspondingly higher coefficient for the Swiss formula). Each scenario also assumes the removal of nuisance tariffs (less than 2%).

<table>
<thead>
<tr>
<th>Scenario</th>
<th>EU25</th>
<th>United States</th>
<th>Japan</th>
<th>Carri</th>
<th>Developing Asia</th>
<th>ACP countries</th>
<th>Other</th>
<th>World</th>
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<tbody>
<tr>
<td>(a) Uniform</td>
<td>6.9</td>
<td>5.6</td>
<td>7.1</td>
<td>6.9</td>
<td>12.8</td>
<td>8.6</td>
<td>8.8</td>
<td>7.5</td>
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<tr>
<td>(b) Uniform excluding peaks</td>
<td>4.6</td>
<td>4.2</td>
<td>4.7</td>
<td>3.5</td>
<td>4.7</td>
<td>2.7</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td>(c) Evening out peaks</td>
<td>7.9</td>
<td>6.4</td>
<td>8.3</td>
<td>8.7</td>
<td>18.4</td>
<td>10</td>
<td>12.3</td>
<td>9.5</td>
</tr>
<tr>
<td>(d) Asymmetric evening</td>
<td>7.7</td>
<td>5.6</td>
<td>7.1</td>
<td>2</td>
<td>13</td>
<td>5.8</td>
<td>9.4</td>
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</tbody>
</table>

Note: All the results are for periods obtained 15 years after the accord, expressed in % with respect to the reference scenario in which protection is unchanged.

Source: Simulations by authors, using the MIRAGE model.

The impact of each scenario is assessed using the MIRAGE CGE model, aggregated at the level of 41 sectors and 7 regions. The simulations indicate that the different scenarios will increase trade for all the regions considered, by between 2% and 19% (see Table). Trade creation is twice as important when tariff peaks are included in the liberalisation scenario, and it is noticeably stronger when peaks are evened out. The sectoral disparities are marked. The greatest increases take place in food and agriculture. In industry, the textiles, clothing and leather goods sectors exhibit the strongest rises.

In each scenario, all regions benefit from the agreement, fifteen years after it is signed. The reason for this outcome is twofold: first, the liberalisation process and the associated costs are spread over time; second, the multilateral and balanced nature of the scenarios under study avoids strong diversion effects. The gain estimated here, assuming a plausible evening out of peaks and preferential treatment for developing countries (Scenario D), is therefore twice as large as the one announced by the WTO, as a result of market access improvements in the last round. By transforming quantitative barriers into tariff instruments, the Marrakech agreement greatly opened up the scope for negotiations on market access. The comparison of different scenarios also stresses that tariff peaks lead to strong distortions and they are sufficiently frequent for their suppression to yield substantial gains.

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For further information see:
- "MIRAGE, a COMPUTABLE GENERAL EQUILIBRIUM MODEL FOR TRADE POLICY ANALYSIS", M.H. BEHR, Y. DECREUX, J.-L. GUÉRIN & S. JEAN,
CEPII WORKING PAPER, NO 2002-17:
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Please find attached a table showing the Medium Term Effects of Four Scenarios of Market Access Liberalisation (in %) for different regions and countries.