

## **GTAP related activities of CPB Netherlands Bureau for Economic Policy Analysis, 2007/2008**

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This is just a summary of our GTAP-related activities since the 2007 GTAP Board Meeting and a brief overview of GTAP-related projects for 2008.

We published studies on the impacts of implementing the EU-biofuels target of a 10% share in road fuel use in 2020 (Industrial policy and economic reform papers no.4) and on the impacts of Croatia's accession to the EU (CPB Document 154). We used WorldScan in assessing the prospects of continued fast growth in India for the Dutch economy (CPB Document 155) and GTAP for an analysis of CAFTA (CPB Discussion Paper 99). We published background reports on our work for DG ENTR concerning the future of European manufacturing (CPB Document 160) and the international spillovers of domestic policies in the EU (CPB Discussion Paper 105).

Our data work activities did include the improvement of bilateral services trade data within GTAP. We have improved the GTAP data on bilateral services trade. Based on the Eurostat/OECD data on "transactions in international services by partner country", we introduced detailed bilateral trade flows in services for OECD countries. We have delivered detailed services trade data to the GTAP Centre for inclusion in GTAP data release 7.

Our planned work for 2008 includes further contributions to the EU Models project for DG ENTR, especially in the field of enhancing EU human capital formation. Moreover, we will address the so-called '20 20 in 2020' climate policy proposal of the European Commission; according to this proposal the EU will impose, if need be unilaterally, a 20% greenhouse gas emissions ceiling in 2020 and a 20% share of renewables in total energy use. To assess this proposal we need to make WorldScan more knowledgeable about renewables. We aim to succeed in this by integrating 'bottom-up' information from detailed energy models within WorldScan. In the field of climate change we are also assessing the carbon capture and storage prospects in Northwest Europe and addressing the 'border tax debate' (essentially: imposing import levies and export refunds on trade with countries that do not belong to the coalition that abates global warming) at the request of the Dutch Ministries of Economics, Finance and the Environment. At the request of the Worldbank Europe Desk we conducted a study assessing the impacts on the Croatian economy of meeting the 'Lisbon targets'. We expect that WorldScan will primarily be used in the next few years for the evaluation of the EU Lisbon strategies (both at DG ENTR and CPB) and for assessing climate-change policy proposals and alternatives.

### **GTAP related publications 2007/2008:**

Wobst, P. (ed.), 2007, Competitiveness Effects of Trading Emissions and Fostering Technologies to Meet the EU Kyoto Targets: A Quantitative Economic Assessment, [Industrial policy and economic reform papers no.4](#), DG ENTR, Brussels

Lejour, A., A. Mervar and G. Verweij, 2007, The economic effects of Croatia's accession to the EU, [CPB Document 154](#)

We explore the economic implications of the possible accession of Croatia to the European Union. We focus on two main changes associated with the EU-membership: accession to the internal European Market and institutional reforms in Croatia triggered by the EU-membership. consumption per capita in Croatia is estimated to rise by about 2.5% as a result of accession to the internal market. In particular the textile and wearing apparel sectors expand. If Croatia succeeds in reforming its domestic institutions in response to the EU-membership, income levels in Croatia could increase even more. In particular, tentative estimates suggest that GDP per capita in Croatia could even rise by additional 8%. Overall, the macroeconomic implications for the existing EU countries are negligible.

Suyker, W. ], H. de Groot and P. Buitelaar (eds.), 2007, India and the Dutch economy: Stylised facts and prospects, [CPB Document 155](#)

India's impressive economic performance over the past few decades has had a positive net impact on the Dutch economy. Peculiar for India is its relatively strong position on the global markets for services. Imports of cheap Indian products have slightly improved Dutch households' purchasing power. Increasing Indian exports did not have a noticeable impact on the pace of restructuring in the Netherlands. Nor did this development lead to a marked widening of Dutch wage differentials. Concerning global competition, Indian export products tend to be more complements than substitutes for Dutch export products. The large Indian market yields interesting investment opportunities for Dutch firms. Over the next few decades, the Indian economy is expected to continue its rapid expansion. Increasing trade with India will continue and is expected to enhance Dutch welfare in the upcoming years and will continue to be associated with modest increases in competition and continued restructuring on some markets.

Francois, J.F., L. Rivera and H. Rojas-Romagosa, 2008, Economic perspectives for Central America after CAFTA: A GTAP-based analysis, [CPB Discussion Paper 99](#)

Using a GTAP CGE application, we assess the main economic results of CAFTA for Central America (CA). Currently, Central America enjoys preferential access to the US market through the Caribbean Basin Initiative (CBI). CAFTA will consolidate and augment these concessions. Meanwhile, the agreement requires widespread opening of CA markets to US imports over time. The implementation of the ATC protocol in 2005 implies increased Chinese competition for the region in the textile and apparel sectors. CAFTA will balance for this new source of competition by allowing better access for CA textiles and apparel products, while creating large opportunities for labour market improvements and FDI inflows to Central America. If these opportunities are exploited, the region has much to gain from CAFTA. However, we also find a strong sectoral readjustment from agricultural sectors to maquila-based industries, which could create important adjustment strains.

Lejour, A. and G. Verweij, 2008, Two Quantitative Scenarios for the Future of Manufacturing in Europe, [CPB Document 160](#)

This paper presents two scenarios for the future of manufacturing in Europe with varying trends in globalisation, technological progress and energy efficiency. From these scenarios, we conclude that the trend towards a services economy is likely to continue with employment shifting away from manufacturing towards services. However, manufacturing production still grows and is important for trade in Europe. The sectors which are already the most open ones for international trade are also the ones mostly affected by this trend. These include chemicals, rubber and plastics, the combined machinery and equipment sectors, textiles and wearing apparel, and wood and other manufacturing. R&D policies and internal market policies in Europe can have strong positive impact on manufacturing. These policies do not alter the trend that Europe's share in global production and trade will continue to decline, but they do mitigate the overall decline, in particular in the chemicals, rubber and plastics, and combined machinery and equipment sectors.

Lejour, A. and H. Rojas-Romagosa, 2008, International spillovers of domestic reforms: The joint application of the Lisbon Strategy in the EU, [CPB Discussion Paper 105](#)

Using the CGE model WorldScan, we assess the benefits for the EU member states of jointly reaching four of the Lisbon targets (i.e. 70% employment, skills upgrades, increased R&D expenditures and administrative burden reductions of 25%), compared with the alternative when each country unilaterally pursues these reforms. With this approach, we estimate the associated international spillovers of joint EU coordination. Spillovers associated with R&D expenditures are a key factor. When the R&D target is jointly reached in the EU, output almost doubles and consumption experiments an even greater increase. The other three targets also produce positive spillovers, but of a much lower magnitude.