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Editorial:
Global Integration
and the Importance of Trade for Growth

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The interaction of trade and domestic growth has been a long-standing topic in the European and in the global debate – both among policy-makers and in academia – and it certainly is of continuing – if not growing – relevance. In Europe it has gained special prominence in the context of European integration and the opening-up of Eastern Europe, but there is also an important global dimension of the whole debate.

The present volume emerged from a conference organized jointly by the Oesterreichische Nationalbank, the Austrian Federal Economic Chamber and the Vienna Institute for International Economic Studies (wiiw). It was inspired by a previous workshop of the Oesterreichische Nationalbank which dealt with strategies for employment and growth, covering numerous policy areas that are interrelated with economic growth. The concept of this workshop was to deepen the analysis in one specific policy area – namely trade policy and its linkages to domestic growth. The subject matter was the intention to bring recent academic work in the area of *International Trade and Domestic Economic Growth* to the attention of a wider audience and also to address important economic policy issues which have not received appropriate attention up to now in Austria.

Theoretically, increased economic integration via rising trade flows is assumed to promote economic growth by leading to a more efficient allocation of resources, by encouraging competition and by cross-border knowledge spillovers. In reality, these effects may not show up automatically or immediately and a number of critical questions arise which illustrate the outstanding policy relevance of the topic.

The academic as well as policy discussion of the subject has many strands:

First, the considerable change in the architecture of international integration over the past decades is of crucial importance. The ongoing liberalization of international flows of goods, capital and labor has affected the international division of labor significantly.

Second, modern firms – even smaller ones – nowadays operate on an international level, making the traditional concepts of capital stock, capacity, trade and domestic vs international activities less relevant.

Third, rapid innovation in, both, technology (i.e. information and communication technology – ICT) and institutional arrangements (new processes, new products, and new markets) have become a stylized fact of market integration all over the world.

Fourth and finally, the combined influence of all these factors has created considerable challenges not only for firms competitiveness but for policy makers as well. Therefore, the thorough assessment of the effects of this evolution is an indispensable prerequisite to cope with these in economic policy.

Keeping these elements in mind, the workshop is based on the belief that a broad analytical approach is necessary to advance research on the issue of why specific mechanisms are in place and to what extent they contribute efficiently to the expected or desired overall outcome. This volume contains a selection of papers which cover some of the recent developments in the international economics literature regarding the topic trade and growth. Given the far-reaching processes of international economic integration which continue to take place in the global economy, this topic will no doubt continue to generate new research which in turn will be indispensable to find the right policy responses to the challenges and opportunities emerging from these developments.

This editorial is organized as follows: First, the subject matter is put into the context of various strands of research in international economics. Second, a short introduction to the development and structure of Austrian exports will be given against the background of important trends in global international integration. In the following section the link between export growth and GDP growth will be discussed, followed thereafter by a brief summary of the contributions presented at the workshop. Finally some comments on selected trade policy issues and, in particular, on services exports are provided.

Progress in the Theory of International Trade

The classical approach to international trade is based on two types of models, the first one refers to David Ricardo's theory of comparative advantage which builds on the differences in relative productivity (or cost) levels of different economies in different sectors, and the second refers to the Heckscher-Ohlin-Samuelson (HOS) model which derives the allocative efficiency gains of international trade from differences of countries in their relative “factor endowments”. The classical theory thus derives the “gains from trade” – which are level effects on countries’ welfare (or national income) positions – from differences in economies supply characteristics, i.e. either from productivity differences as in the Ricardo model or from differences in the relative availability of factors of production (such as labor, land and capital; skilled and unskilled labor, etc.) Hence, in the classical approach it is the difference in economies’ characteristics which gives rise to the benefit from international trade and such benefits are reaped through a pattern of international inter-branch specialization. As such differences across economies are particularly important amongst countries which differ in their levels of economic development (reflected in their relative productivity positions and/or in factor endowments). One can say that the classical approach is particularly conducive to show the benefit of international trade between more developed and less developed economies and hence of so-called ”North-South” trade.

In the immediate post-WWII period, however, the striking fact which emerged was that international trade (and also foreign investment activity) expanded most between the advanced (i.e. higher income) economies, and hence between countries which did not differ much in their overall levels of economic development. Hence it was ”North-North” trade which accounted for most of the increase in global trade flows and this trade was not based on a strong pattern of inter-industry specialization. International trade theory responded to this challenge which seemed at odds with classical trade analysis by developing what is known as “new trade theory” and the 2008 Nobel prize award to Paul Krugman is a recognition of his timely contribution to international trade analysis (see particularly his classic papers, Krugman, 1979, 1980). Why do gains from trade emerge from intensified trade links between rather similar types of economies? The answer lies in the combination of exploiting, on the one hand, the advantages of economies of scale which can be reaped when a larger market can be supplied and, on the other hand, the benefits to consumers who can purchase a wider range of products (“love for variety”) from a larger pool of producers given that each of the products supplied has an advantage to be produced at a higher scale of production. International trade between economies can thus reap, both, the cost advantages of producing at a higher scale and also bring consumers the benefit of offering a wider range of product variants than it would be the case if each country had to find its own compromise solution between reaping economies of scale and consumers’ “love for variety”.

Hence, if we take the two types of theories together, the classical theories and the “new trade theory”, international economics provided the basis for both explaining the (national income) benefits of “North-South” trade and of “North-

North" trade. Regarding the subject matter of international trade and economic growth, however, one should concede that both approaches proved the "gains from trade" only in a comparative static setting, i.e. showing only level effects from intensified trade and no longer-run growth effects. However, from the 1980s onwards there was also a boost in new growth theoretical models and these were soon to be integrated with models of international trade (see particularly Grossman and Helpman, 1991). The important progress made in these models was to show that international economic integration (through trade but also through foreign direct investments) can speed up the rate of (endogenous) technological progress either in the form of increased product diversification and/or changes in process technologies which can have lasting effects on the trend rate of global economic growth. The mechanisms through which such "growth dividends" could be reaped from international economic integration were the same as already recognized in the older, comparative static trade models, i.e. reaping the benefits from international specialization. Thus, the "North" (advanced economies) could specialize on skill-intensive, R&E (research and development) activities or on sophisticated goods-producing branches which require greater skills, while the "South" would benefit from importing a wider range of differentiated inputs which allows its producers to improve their production technologies and would also offer its consumers a wider range of final consumer goods.

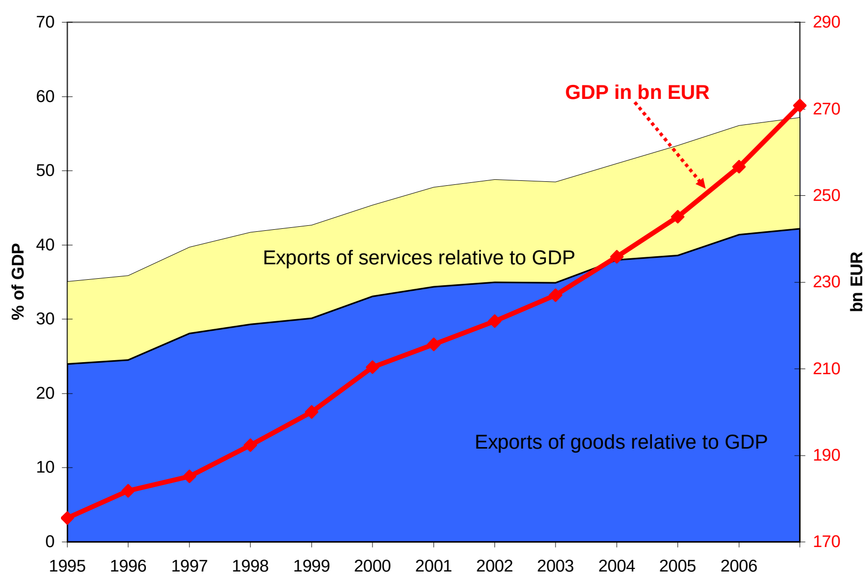
The above growth and trade theoretical approaches allow a further deepening of our understanding of the potential growth benefits which could be derived from international specialization and they combine insights from both classical and new trade theoretical approaches. By the mid-1990s another real world phenomenon was increasingly noticed and required addressing by international economists: the increasing incidence of "outsourcing" and of "off-shoring". These phenomena refer to the possibilities that the advances in international transport and logistics technologies opened up for international producers to allow production activities to be split up into more differentiated production stages or "tasks" (see e.g. Grossman and Rossi-Hansberg, forthcoming). A new strand of literature opened up analyzing both theoretically and empirically emerging patterns of "production fragmentation" (see Arndt and Kierzkowski, 2000; Feenstra, 1998). Linked to this literature was also the concern with different organizational choices of internationalization. Questions addressed concerned e.g. whether the outsourced tasks were to be performed within the same firm but in another country or outsourced to other firms, either at arms-length or through a license agreement. Hence a new branch of international economic research evolved which attempted to look not only at fragmentation per se but also at the organizational forms which could be adopted to organize international production and trading relationships (for an excellent overview article, see Helpman, 2006).

The most recent innovation to the international economics literature is the so-called "new, new trade theory" (see the contributions by *Greenaway* and *Kneller* and by *Felbermayr* and *Jung* in this volume). Here an age-old assumption made in the international economics literature has been dropped; namely, the assumption that we can focus on the characteristics of "representative firms" instead of allowing the whole distribution of heterogeneous firms (i.e. firms which are distinguished by different attributes, such as productivity levels) to be looked at in analyzing processes of internationalization. This literature goes back to empirical insights gained by Bernard and Jensen (1999; see also Bernard et al., 2003, 2007) that firms which export (or invest abroad) might have different characteristics than those which only operate domestically. The interesting point which emerges when we look at distributions of firms is that we can show how different segments of the firm population will be involved in different types of international activities, such as in exporting or in foreign direct investment (the pioneer theoretical formulation in this respect is due to Melitz, 2003). It is explicitly recognized that each form of international activity requires additional set-up costs (such as to enter a market, adjust to different regulatory features, acquire new information regarding customers and production sites, etc.) and the ability of different firms to incur such additional costs and make a success of such operations leads to a segmentation of the firm population into those who export, set-up production facilities abroad or continue as firms with only domestic operations. This literature did not only make strong progress in theoretical terms in recent years but the increased availability of firm level information also developed this field into a very intense area of empirical research.

Global Integration Trends and the Development of Austrian Exports

Two more features which are important trends in global international integration and which are covered by contributions in this volume should be mentioned explicitly: the first refers to the much enhanced role which services activities (in contrast to goods production) now play in international trade and the second to the very important role which groups of "successfully catching-up economies" (SUCCESS economies in short) play in the current dynamics of global economic integration. Past trade analysis has almost exclusively focused on goods trade with an implicit assumption that services, with the exception of transport services and tourism, are basically non-tradable (few people would travel abroad to have their hair cut). With the emergence of the fast growing area of international business and financial services this has dramatically changed and trade in services now accounts for close to one third of global trade. It is also clear that the internationalization of business services has much benefited from the advances made in communications, logistics and transport technologies. Service activities also play a crucial role in facilitating "fragmentation" in goods production and in the logistic facilitation of international production networks. In the context of "North-South" trade the "off-shoring" of services to countries like India has attracted much attention. This area of international trade is thoroughly examined in the contribution of *Francois* and *Woerz* in this volume; the availability of new and better data sources on services trade has also made this a thriving line of new empirical research. The other area, namely the increasingly significant role which groups of SUCCESS economies (such as China, the other South East Asian economies, the Central and Eastern European economies, or Turkey) play in global and regional trade flows is explored in the contribution by *Landesmann* and *Stehrer* in this volume. They base their analysis on a model with a dynamic Ricardian structure (i.e. where comparative advantage positions are determined by relative productivity levels) and which allows for differentiated catching-up processes in productivity levels across economic activities. Such patterns of catching-up shift comparative advantage positions in line with empirically observed trends and they can account for an increased need for skilled workers in both "Northern" and "Southern" (i.e. catching-up) economies. In a detailed examination of "East-West" European integration they examine the characteristics of outsourcing patterns as an application of this model of trade and catching-up.

Chart: Austrian Export Quota from 1995 to 2007



Source: Statistics Austria.

Recent export figures with respect to Austria have been impressive. In 2007, the total of exports amounted to EUR billion 114.8. 72.5% of these exports were directed to the European Internal Market. Overall export in goods rose 10.5% compared to 2006. Growth drivers among others were exports to Asia (16.3%) and the CEE countries (19.8%).

These growth figures are not a recent phenomenon. Since 1995 when Austria became a member of the European Union exports of goods had been on a constant rise. Exports of goods in relation to GDP have risen from 24% in 1995 to 42.2% in 2007. If exports of services were included the respective quota rose from 35.1% to 57.2%. The major part of the increase thus originated in the export of goods. This can also be seen in the chart.

Nominal exports of goods increased by 64% from 2000 to 2007. Exports to the new EU Member States grew above average (97%) and to the old Member States significantly below average (50%). Dynamic export growth was seen to the US (65%) and to Canada (74%) as well as to China (235%).[1]

The link between exports and domestic growth is a positive one. In a recent economic report of the Austrian Institute of Economic Research this is illustrated by the conclusion "External demand remained the main driver of growth" (Steindl, 2008). It is also confirmed by forecasts of the Oesterreichische Nationalbank (Diebalek et al., 2008).

Central Hypothesis: Export Growth Drives GDP Growth

A positive link between trade and growth – in the case of Germany – was questioned by the German economist Hans Werner Sinn who created the expression of the "bazaar economy". He claims that Germany made a shift from an industrial economy to a bazaar economy (Sinn, 2005). The underlying assumption of Sinn's hypothesis is: less and less goods are produced domestically despite growing imports and exports. The home market becomes predominantly a consumer market generating less welfare due to outsourced production. International division of labor would also lead to a division of the value chain generating a relatively larger share of value abroad. Less welfare in the domestic economy and decreasing competitiveness of the domestic industrial sector are the consequence.

The hypothesis of the bazaar economy is challenged by a set of very restrictive assumptions: First, it focuses exclusively on the industrial sector. Therefore, welfare gains by the services sector in general and welfare gains due to exports of services are neglected. Input output analysis e.g. for Austria shows that the export of goods as well as the export of services create value (Schneider and Mahlberg,

[1] The respective growth rates were computed on the basis of Statistics Austria data (www.statistik.at/OnlineAtlasWeb/).

2005).[2] Second, outsourcing and foreign direct investment have the notion as a means of loosing competitiveness but the contrary is often the case. Industries maintain their competitiveness by outsourcing parts of their production in order to maintain other divisions of the firm in the home country (Egger and Egger, 2001; Altzinger, 2002). Third, although intra-industrial trade is very important for Austria (close to 90%) a relatively small share of Austrian goods and services is exchanged with countries with significantly lower wages (OECD, 2005).

The hypothesis of the Bazaar economy is often used to question liberal trade policy but in the end it fails to deliver arguments for a more restrictive trade policy. This workshop was intended to contribute to a more comprehensive view on the link between trade and growth – in the sense of analysing all sectors of the economy and all export channels that is not only goods but also services and foreign direct investment.

The Contributions to the Workshop

The contribution of the key note speaker *David Greenaway (University of Nottingham)* was about firm heterogeneity, exporting and foreign direct investment. He provided a survey and an evaluation of the existing literature. The literature points to a number of regularities: exporting firms tend to be larger and more productive than non-exporters; sunk costs tend to be important; multinational firms tend to be more productive than domestic firms. Besides these findings much research remains to be done, i.e. relating to learning by exporting.
In the first session, a more theoretical and global point of view was taken. Since the papers are quite different in their nature a short description of each is given.

Michael A. Landesmann's and *Robert Stehrer's* presentation (both *Vienna Institute for International Economic Studies*) – *Trade and Growth: South-North Integration, Outsourcing and Skills* – intended to capture the phenomenon of outsourcing and analysed the impact of this type of trade integration on skill demand. They observed changes in skill content and in the shares of imports by low-/medium-income economies in particular in the areas of processed inputs and parts production. Therefore, they see an outsourcing story combined with catching up confirmed.

Gabriel Felbermayer's and *Benjamin Jung's (University of Tübingen)* presentation – *Endogenous Export Modes* – dealt with the optimal choice of export modes on firm level. Foreign markets either require a local foreign partner, who

[2] A more recent study Bayerl et al. (2008) conclude that some bazaar characteristics are evident in the Austrian economy. Nonetheless, the authors cannot find any evidence from their investigation that this development has hurt the Austrian economy so far. Export growth has been sufficiently dynamic in order to raise the share of export-induced value added in total GDP.

acts as a general importer or a trade intermediator or they need to set up an own sales representation. The choice of export modes plays a key role in strategic management decisions and has received considerable attention in the academic business literature.

Joseph Francois (Johannes Kepler University, wiiw and CEPR) and *Julia Woerz* (*Oesterreichische Nationalbank)* with their paper – *Service Sector Linkages: The Role of Services in Manufacturing* – found that increased imports of business services promote manufacturing exports and value added in the most technology and skill intensive industries while they observed a negative effect in labor intensive industries. Overall, they empirically confirmed that the impact of openness to trade in services is gaining in importance.

The second session provided empirical evidence on the economic interlinkages between Austria and a set of other countries. *Gerhard Fenz* and *Martin Schneider (both OeNB)* showed that the Austrian economy is strongly linked to the German economy. *Thomas Reininger (OeNB)* analyzed the import demand functions of new Member States and what is of particular interest to what extent import demand is driven by external demand stemming from the main trading partner (via exports).

The third session gave an overview of the quantitative analysis on the impact of further liberalization on welfare. *Przemyslaw Kowalski* from the *OECD* critically analysed among others the accuracy of models estimating such effects and highlighted the fields for further research.

Trade Policy and Creating the Adequate Business Environment for Services Exports

Eventually, this workshop should be regarded as a further stimulus for deepening the analysis and the discussion of international trade and also trade policy. Trade policy is not as present in the national political discussion as it could be.

One reason is probably the institutional setting due to the accession of Austria to the European Union. The sovereignty on trade policy has been transferred to the institutions of the EU. Decision-making has become more complex and the direct influence of the national government on trade policy has declined. In addition, many decisions on trade policy are taken at the WTO level which increases the complexity of decision making still further.

Another possible reason is the variety of trade policy instruments, which are difficult to grasp, be it in the public or be it with economic analysis. In the past public discussion and economic analysis rather focused on tariffs than on non-tariff barriers. In empirical and theoretical analysis often only tariffs are considered since they can be "easier" grasped. A more complete picture is necessary since the story is often told in the area of non-tariff barriers. Interfield, a relatively recent paper by

Daniel Kono (2006) shows that tariffs have overall decreased in democratic countries but the opposite was the case for core non-tariff barriers.

Thus, trade policy should be more present on the national political agenda. More profound analysis on trade and its effects has to be carried out and it is fortunately already on the way. A year ago the research platform Research Centre for International Economics (FIW) was founded. Deepening analysis in the areas of goods exports, services exports, FDI and on international competitiveness in general was undertaken. The larger part of the initial studies is already published. [3] The focus on applied empirical studies deriving political advice should be maintained and ideally even enhanced.

As regards the assessment of the current trade policy at the WTO level there is currently little reason for optimism. The Doha Round shows little progress. After seven years of negotiations results are poor. The current economic downturn would have asked for positive signs which could not be delivered by the recently failed trade talks. It can be expected that WTO members will engage more strongly in bilateral trade agreements which are not a sensible alternative to already established multilateral agreements. Therefore solutions have to be found – maybe an institutional reform of WTO – in order to bring the Doha Round to an end with hopefully encouraging results.

Economic policy in the sense of “Standortpolitik” covers a whole array of policy sectors that cannot be dealt with in a short comment. Thus, concentration should be on one policy area that received too little attention in recent years: the services sector. In the light of Julia Woerz’s and Joseph Francois’ analysis of the competitiveness of the Austrian services exports efforts of establishing a strong and competitive services industry have to be undertaken. This is even more the case since the neighbor countries are becoming more and more competitive while at the same time Austrian services exports lack dynamics relative to the performance of the goods sector. As a medium-term goal Austria should become an important services cluster for modern and complex services on a regional scale as is – interfield – Munich. Accompanying measures for structural changes in the services sector would be necessary. Education and skills should be fostered, research and development activities should be oriented more strongly towards modern services, subsidies should be redirected more strongly to the services sector and marketing activities for being a destiny country for services outsourcing should be undertaken.

Recently the Ministry of Economics and Labor presented a mission statement for external trade. The mission statement made also clear that the export of services is of central importance. Obviously the awareness among experts concerning the topic is present. Now the next steps have to be taken: first awareness building among politicians and entrepreneurs. Second, the business environment has to be

[3] For the available publications see the website www.fiw.ac.at

improved by concrete political measures, and finally entrepreneurs must be ready to engage more strongly in the development of complex services and to sell them to external markets.

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