SEMINAR PAPER 97-12

COMMERCIAL LINKS BETWEEN WESTERN EUROPE AND EAST ASIA: RETROSPECT AND PROSPECT

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October 1997

CIES SEMINAR PAPER 97-12

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October 1997

An earlier draft of this paper was presented at a conference on Europe, East Asia, APEC, and the ASEM Process, London, 20-21 May 1997. Thanks are due to Ulrich Hiemenz for helpful comments and to the Centre for Economic Policy Research, the Australia-Japan Research Centre, and the Australian Research Council for financial assistance. (Forthcoming as Ch. 2 in *A Shared Global Agenda? Europe, East Asia, APEC, and the ASEM Process*, edited by P. Drysdale and D. Vines, Cambridge and New York: Cambridge University Press, 1998.)

ISBN 0 86396 359 5

ABSTRACT

Commercial Links between Western Europe and East Asia: Retrospect and Prospect

by Kym Anderson and Joseph F. Francois

East Asia has rapidly become the third centre of gravity for global economic activity. North America is relatively well integrated with East Asia, but Europe is not. This paper explores the extent to which economic growth and trade policy developments over the next decade or so will strengthen European-East Asian economic integration, and what scope there is to facilitate that set of bilateral relationships. Use is made of a modified version of the global CGE model known as GTAP to project the world economy to 2010 under various scenarios including Uruguay Round implementation, a trans-Atlantic free trade agreement, APEC liberalization, and a new WTO multilateral round. The bilateral trade consequences of economic growth and Uruguay Round implementation highlight the fact that as East Asia's relative importance in the world economy keeps growing, so too does its importance to Europe. However, the relative importance of Europe to East Asia is projected to grow very little, although in absolute terms the volume of that trade still grows enormously.

Keywords: European Union, East Asia, APEC, Uruguay Round, bilateral trade

JEL Codes: F11, F13, F14, F15, F17

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NON-TECHNICAL SUMMARY

This paper first examines historical intra- and extra-regional trade and foreign investment data to trace the pattern to date of bilateral trade and investment flows between Western Europe and East Asia. With that as background, it then explores empirically the total and bilateral trade growth prospects of those regions over the period to 2010.

The historical data show that despite the spread of regional integration agreements, extra-regional trade as a percentage of GDP has risen for most regions and has not fallen even for Western Europe. Both trade and investment flows between Europe and East Asia have been growing. However, they are only about two-fifths what one might expect given the importance of each region in global goods trade and FDI, suggesting considerable room for growth in the intensity of their bilateral relationship.

Several prospective developments will influence future trade outcomes. One is Uruguay Round implementation. Another is the accession to the WTO of China and hence Taiwan. A third is a (now less likely) trans-Atlantic free trade agreement (TAFTA), A fourth is the challenge of delivering further MFN trade liberalization in the Asia-Pacific through the APEC process. And finally there is the prospect of a new multilateral round of WTO-sponsored reform early next century. Each of these issues is addressed empirically in the second half of the paper. The analysis is conducted in the context of on-going global economic growth. A modification of the latest forward-looking version of the global CGE model known as GTAP is used to provide those projections.

The effects of implementing the Uruguay Round by 2010 are shown first without and then with China and Taiwan participating as WTO members, to show just how much difference their accession could make to the world economy. Assuming sanity on that issue prevails and both join the WTO soon, the scenario involving their membership and full implementation of the Round is taken as the modified base case in 2010, and it is compared with three alternative scenarios. These examine the effects of a TAFTA, of full MFN liberalization of trade in the APEC region, and of a global trade liberalization involving a further 50 per cent cut in post-Uruguay Round tariffs. All are shown to have a substantial effect on trade and welfare not only in East Asia but also in Western Europe and elsewhere.

Several conclusions are worth highlighting from those projection exercises. First, both the Uruguay Round and the continuing rapid growth of East Asia's developing economies ensure those economies will continue to increase their shares of Western Europe's trade. By contrast, the share of East Asia's trade with Western Europe grows little, because East Asia's importance in world trade keeps rising and hence so too does the share of its trade that is intra-regional.

Second, if a TAFTA is formed, the gains are relatively small to North America and Western Europe and they are at the expense of rest of the world. By contrast, if the remaining barriers to goods trade in APEC countries following the Uruguay Round's implementation were to be removed by 2010 and on an MFN basis, trade between

Europe and APEC would be substantially larger and virtually all (including non-APEC) regions would gain.

Finally, the scenario in which another multilateral round of tariff cuts is implemented early next century shows that there will still be very substantial room for further trade reform following the Uruguay Round's implementation. As with all projections exercises, several caveats are in order. One is that these results are very much lower-bound estimates, especially because services trade reform is not modelled and endogenous growth is not built in. Nor are policy interdependencies taken into account: if the Uruguay Round is fully implemented, China joins the WTO, and APEC does liberalize by 2010, the world economy and especially the economies of the APEC region would almost certainly grow faster, and even more so if a further WTO-sponsored Round were to be concluded.

Several implications can be drawn from these results. First, the importance of fast-tracking the WTO applications for the former centrally planned economies and especially China is clear. Second, strengthening the multilateral trading system's capacity to facilitate the continuation of rapid economic growth in East Asia and its positive spillover effects to regions such as Europe is also important (eg, by keeping issues peripheral to trade, such as labour standards, off the WTO's agenda). And third, the current low degree of European-East Asian integration suggests there will remain ample room over the next decade or so for the ASEM process to contribute to trade and FDI growth between the two regions.

COMMERCIAL LINKS BETWEEN WESTERN EUROPE AND EAST ASIA: RETROSPECT AND PROSPECTS

Kym Anderson and Joseph F. Francois

1. Introduction

Over the past 15 years, regional and global economic integration both took important forward steps. During the period 1985-94, the ratio of world trade to GDP rose three times faster than in the preceding ten years and nearly twice as fast as in the 1960s. Since 1985, the flow of foreign direct investment as a share of global GDP has doubled (World Bank 1996). This internationalization is due to a considerable extent to unilateral trade and macroeconomic reforms and associated falls in international transport and communications costs. But those reforms themselves were stimulated by and contributed to regional integration initiatives in Europe, North America and smaller regions. Moreover, the most comprehensive of multilateral initiatives, the Uruguay Round, also promises to contribute to globalization during its implementation over the next few years. All these developments have made and will continue to make the national economies of the world more interdependent, although the nature and extent of the contributions to integration vary considerably across regions.

In an important survey paper, Winters (1996) makes clear that, despite a massive research effort, neither theoretical models nor empirical studies are yet able to answer unequivocally Bhagwati's memorable question as to whether regional integration agreements (RIAs) are stepping stones or stumbling blocks to global economic integration and welfare improvement, such are the complexities of the economics and political economy involved. Even if attention is focused on just one RIA such as the European Union and its effects on outsiders, analysts are unable to agree on whether the rest of the world is better or worse off with than without the EU -- not least because we are unsure of the counterfactual.

Bearing this in mind, the present paper has two modest aims. The first is simply to examine the history of regional and global economic integration of Europe, East Asia and elsewhere, as reflected in actual intra- and extra-regional trade and investment data, and to see what this historical pattern has meant for bilateral trade and investment flows between Western Europe and East Asia. With that as background, the second aim of the paper is to analyse empirically the total and bilateral trade growth prospects of East Asia and Western Europe over the next dozen years. The analysis is conducted in the context of regional and global economic growth, Uruguay Round implementation, and possible additional APEC and other trade liberalizations. We work with a forward-looking numerical model (a global CGE model) to provide those projections of the world.

Several potential developments will influence these prospective trade and FDI outcomes and their effects on economic welfare. One of the more important is the accession to the WTO of China (and hence Taiwan) and its impact on China's economic growth. A second is the extent to which the Uruguay Round commitments are implemented on time, particularly with respect to the Agreement on Textiles and Clothing. A third is the challenge of delivering further MFN trade liberalization in the Asia-Pacific through the APEC process. And a fourth is a possible new WTO round of multilateral trade negotiations. Section 2 of this paper is devoted to exploring the historical record. We then turn, in Sections 3 and 4 of the

paper, to an examination of prospects under various scenarios. The final section of the paper is devoted to drawing out policy implications from this empirical exercise.

2. International economic integration in Europe and Asia: some facts[1]

During the past three decades, the economic centres of gravity in the world have shifted considerably. While Europe continues to contribute about one-third of world GDP and half of global international trade, East Asia has nearly trebled its shares of both GDP and trade. Its GDP share has grown at the expense of North America and its trade share at the expense of other developing and transition economies (Table 1). East Asia's share of world trade now exceeds North America's. If one nets out the intra-bloc trade of the industrial economies from theirs and global trade, then East Asia's share of global extra-bloc trade now exceeds the whole of Europe's. When the EU is treated as a single trading entity (as it often now is by compilers of world trade statistics), it turns out that six of the top nine exporting economies are now East Asian, their combined merchandise exports accounting for almost 30 per cent of the global total, and Malaysia, Thailand and Indonesia are among the next eight (WTO 1997).

What about the regionalization of international trade and investment flows? For Europe (East and West combined), the intra-regional trade share has been remarkably stable for the 160 years for which data are readily available. The share was two-thirds throughout the nineteenth century, it dropped to two-fifths in the middle half of this century, and has since crept up to around three-quarters. But for most of that long period the ratio of Europe's trade to GDP has been increasing -- so much so that the share of Europe's GDP that is traded with the rest of the world quadrupled during the 100 years to 1930, and it has remained at around one-eighth of GDP since then (Anderson and Norheim 1993).

Nonetheless, compared with other regions, both Eastern and Western European trades have been much more concentrated in their own regions. Western Europe's intra-regional share of total trade has risen steadily from 50 to 70 per cent since the 1950s, and Eastern Europe's jumped from less than 20 to 60+ per cent with the formation of the CMEA (before crashing back to below 20 per cent following the CMEA's demise in the 1990s). By contrast, the intra-regional trade shares have been fairly steady at around a much lower one-third for North America, no more than one-fifth for the rest of the Americas, and until recently around two-fifths (now one-half) for Asia (Table 2).

One would expect Asia's intra-regional trade share to have grown simply because East Asia's share of global trade has grown so dramatically. The impact of the latter can be netted out by calculating the index of intensity of intra-regional trade. That index is defined approximately as the share of intra-regional trade in a region's total trade as a ratio of the region's share of global trade.[2] Between 1958 and 1990 that index increased by 15 per cent for both Western Europe and North America and rose by more than 40 per cent for Eastern Europe/FSU, but it *fell* by 27 per cent for Asia (Anderson and Norheim 1993). That might suggest the intensity of Europe's trade with itself is being reinforced by its regional integration agreements, whereas the absence of substantial inward-looking agreements in East Asia is having the opposite effect on Asia's trade pattern.

But what about the share of GDP that is traded extra-regionally? For Western Europe, North America and Asia those shares are currently remarkably similar at around 15 per cent. North America's share doubled over the past two decades because of the rise in its overall

[1] This section draws on Anderson (1997).

[2] See Anderson and Norheim (1993) for the precise definition and detailed calculations of the intra-regional trade intensity index.

trade-to-GDP ratio but the others have changed little. For the world as a whole the extra-regional trade share of GDP has increased since the 1960s from one-eighth to one-sixth (Table 3). But notice that within Asia the developing countries have raised substantially their share of GDP traded extra-regionally, from one-fifth to one-third over that period.

What has been happening to bilateral trade flows between Europe and Asia? With the relatively rapid growth of Asia's trade, the importance of each to the other has been converging steadily. For example, between 1990 and 1995 the share of Western Europe's trade with Asia rose from 8.6 to 9.6 per cent while the share of Asia's trade with Western Europe fell from 19.3 to 16.4 per cent. Those data imply bilateral export trade growth rates over those five years of about 12 per cent pa from Western Europe to Asia (double its total export growth rate) and 8 per cent pa growth in the opposite direction (two-thirds of Asia's overall trade growth rate). By 1995 each region was trading with the other just on one-third of its total extra-regional trade. However, each's share of the other's total trade is only about two-fifths as large as the other's share of global trade, suggesting much room yet for improving trade relations between the two regions (Table 4).

Much the same is true of trade between Asia and Central and Eastern Europe plus the former Soviet Union. That trade has grown much slower than each of those region's total trade. Indeed there has been virtually no growth in exports from Asia to those economies in transition over the five years to 1995. The former COMECON economies still trade very intensively among themselves (albeit less than in 1990) and with Western Europe (which, in the data in Table 4, includes eastern Germany). The share of their exports to Asia is less than half Asia's share of world trade, and the share of Asia's exports to them is only one-third the latter's share of world trade.

Foreign direct investment (FDI) flows have grown much faster than trade flows during the past decade or so, but the growth has not been uniform across regions. Outward FDI has grown relatively slowly from the aging economies of Western Europe and Japan during the 1990s, especially compared with North America, Australasia and Asia's newly industrialized economies whose inward FDI also has grown rapidly (Table 5). During the present decade China has been more than four times as important as a host to FDI than all of Central and Eastern Europe plus the FSU. In 1995 it accounted for one-eighth of global FDI inflows, equal in value to more than one-quarter of all of Western Europe's or one-third of North America's FDI outflows. Historically, Hong Kong has been a major supplier of investment funds for China.

In the decade to 1995 the importance of FDI in gross fixed capital formation rose by more than a third globally. Little of that change is evident in OECD countries though. By contrast, that indicator for developing Asia rose from 2.6 to 8.2 per cent for inward FDI and from 1.4 to 5.0 per cent for outward FDI, taking it from well below the global average of 3.2 per cent in 1984-89 to well above the global average of 4.0 per cent in 1995 (United Nations 1996, Annex Table 5).

The regional distribution of foreign direct investment stock data in 1992 and their growth since 1980 are reported in Table 6. The European Union has invested only a small proportion of its funds in East Asia, and of the FDI funds invested in the EU only a small proportion came from East Asia. In each case the shares by 1992 amounted to only 4 per cent of the EU total, or around 8 per cent if intra-EU FDI is not counted. The numbers in parentheses in Table 6 suggest these shares changed little between 1980 and 1992, although they may have increased in the 1990s (OECD 1996; European Commission and UNCTAD 1996; UNCTAD 1996). Those 4 per cent shares are much smaller than East Asia's shares of global FDI stocks, both outward and inward (16 and 10 per cent, respectively). The story is similar from the other region's viewpoint: East Asia had by 1992 around 16 per cent of its

outward FDI invested in EU-12, and almost the same share (14 per cent) of its inward FDI had come from the EU – but at a time when the EU accounted for 45 and 40 per cent of global outflows and inflows of FDI, respectively. So while it is true that the EU has been much more important to East Asia than vice versa in terms of the volume of FDI, that is nonetheless what is to be expected given the EU's greater importance in global FDI stocks. Again as with goods trade, these relative shares suggest that the EU is less than two-fifths as important to East Asia's FDI as the EU is to the rest of the world, and likewise for the importance of East Asia to the EU. It needs to be kept in mind, however, that small changes in these shares mask huge growth in levels of foreign direct investment, however. Between 1981-83 and 1991-93, the ratio of FDI to GDP grew for OECD countries from 0.9 to 1.6 per cent and for East Asia's developing countries from 0.7 to 1.1 per cent (World Bank 1996, Figure 2).

In short, these merchandise trade and investment data make clear that the world is becoming more integrated not only within regions but also between the major regions, despite the fact that there has been an unprecedented proliferation of regional integration agreements this decade, especially in Europe. This conclusion probably would not change greatly if services trade data had been able to be included. That does not mean those agreements are necessarily a good thing for the world economy, however, because even more inter-regional integration and economic growth may have occurred without them. Certainly the data in Tables 4 and 6 suggest there is still considerable scope for expanding European-Asian trade and investment, given the importance of each region in global trade and FDI. That raises the question to be addressed in the next section: to what extent will economic growth and the trade liberalizations in prospect for the next decade raise bilateral flows and shares and improve economic welfare in the two regions?

3. Numerical projections to 2010

We now turn from historical fact to numerical conjecture. To this end, we work with a global CGE model that employs the GTAP data set (see below) and IMF and World Bank projections for GDP in 2010 (see Anderson et al. 1997a,b and IMF 1997).

The interaction of open economies is complex, involving both trade flows and investment flows. It is even more complex if we consider intertemporal interactions, as they spill over to accumulation mechanisms, affecting the stock of capital and hence the evolution of the structure of production. Given enough data, one could construct and estimate an econometric model of the world economy that allowed for formal estimation of all of these effects. However, the current state of data and theory precludes such an approach. While econometrically-based linked macro models are the accepted compromise for macroeconomic trends, this precludes analysis of general equilibrium effects across industries. As our interest is in multisector interactions, we follow the recent literature (Anderson et al. 1997a,b) and employ a calibrated 6-sector, 14-region multi-region general equilibrium model of the world economy. The present application differs in two important ways from the recent projections literature: the model involves endogenous capital accumulation, and it also includes stylized representations of scale economies and imperfect competition. We provide only a brief description of the model here, referring the interested reader to detailed technical references.[3]

[3] Versions of this model have been implemented in both GAMS/MPSGE and GEMPACK. Model code for both are available at the following website: http://www.intereconomics.com/handbook. In terms of model structure and implementation, the critical difference is that Francois et al. (1996) work with the GAMS/MPSGE version of the model, while for this application we work with GEMPACK. The theory remains the same.

The central feature of computable general equilibrium models is the input-output structure, which explicitly links industries in a value added chain from primary goods, over continuously higher stages of intermediate processing, to the assembling of goods and services for final consumption by households and governments. The link between sectors may be direct, like the input of steel into the production of cars, or indirect, via intermediate use in other sectors. Sectors are also linked through competition for scarce resources (primary factors of production such as land, labour and capital). Our model, which is a projections version of the same general equilibrium model employed by the WTO Secretariat for assessment of the Uruguay Round, is no exception. At the firm level, production involves primary factors adding value to intermediate inputs. Formally, production in the model involves a nested production function, consisting of CES value added and Leontief intermediate demand. Heavy/intermediate industrial sectors are modelled as imperfectly competitive and subject to large-group monopolistic competition (i.e. constant markups and free entry). We also model the service and extraction sectors as being subject to modest scale economies, modelled through declining average costs and average cost pricing.

Demand for firm-differentiated products at the intermediate and final product level is based on a CES aggregation function, along the lines of Ethier (1982) and Krugman (1980). For competitive sectors, import demand is modelled with a (non-nested) Armington-type CES aggregator. Both the firm level differentiation, and the Armington differentiation, imply two-way trade in products differentiated either at the firm or regional level. Final demand, at the upper-tier, is defined over regional households, and is modelled as Cobb-Douglas. Trade also involves trading costs (a mix of trade and transport services), which are modelled explicitly.

We assume that savings rates are fixed, so that changes in the pool of regional savings (due to income changes) result in changes in investment spending. Changes in regional investment levels in turn lead to changes in steady-state capital stocks. Capital markets are modelled as regional markets, to match the stylized facts about long-run capital accumulation patterns. In the model, changes in incomes therefore feed through to endogenous changes in the capital stock and thereby in the structure of production.

Social accounting data are taken from the final revision (August 1996) of the Global Trade Analysis Project (GTAP) version 3 data set. That GTAP data set includes information on national and regional input-output data, bilateral trade flows, final demand patterns, and government intervention, and is benchmarked to 1992. Its protection estimates are based on detailed World Bank and WTO data on pre- and post-Uruguay Round protection levels (McDougall 1997). Our regional aggregations, spaning all of the economies of the world, are shown in Table 7, along with the pre-and post-Uruguay Round protection rates.

In projecting a baseline data set for 2010, the world economy as described above for 1992 is re-calibrated to the 2010 baseline GDP levels using the rates of growth shown in Table 7, assuming no changes to existing trade and other policies. In doing so, the effective labor supply is adjusted to reflect both expected labor supply growth (based on World Bank projections) and labor productivity gains, while physical capital stock projections are based on the long-run accumulation closure and the stock of land is held constant.[4] The implications of

[4] The calibration of projection models is more art than science. In the present application, we are working with external (IMF/World Bank) estimates of overall GDP growth. Combined with the underlying structure of the model, we estimate a mixture of capital accumulation and labor productivity gains consistent with these projections. Of course, capital stocks may also adjust because of foreign investment flows, and GDP projections may or may not be exactly consistent with underlying capital stock trends as implied by historic data. In the end, the slack is made up for by our appeal to factor productivity growth. Ideally, a fully specified intertemporal model, with sufficient sectoral data on historical physical and human capital stocks and the like, would be used. However, like the fully specified multi-sector econometric model we alluded to earlier, this ideal is unachievable

these projections for the geographic distribution of GDP are illustrated in Figure 1. From the figure it can be seen that East Asia is expected to continue to increase substantially its share of global GDP during the next decade or so, while Europe's is expected to fall somewhat.

The baseline scenario for 2010 is then altered to reflect implementation of the Uruguay Round (as detailed in the various papers in Martin and Winters 1996). That requires specifying the associated commitments including cuts in tariffs, tariff equivalents of nontariff import restrictions, and export subsidies agreed to under the Round. Reform of the system of MFA textile and apparel quotas is an especially important part of the Uruguay Round reforms for East Asia. In the present application, MFA restrictions are represented as export tax equivalents.[5] The nonagricultural information is obtained largely from the WTO's Integrated Data Base (Reincke 1997), while the expected agricultural protection cuts are based on extensive research conducted at the World Bank (Hathaway and Ingco 1996). These modelled reforms explicitly exclude protection cuts in China and Taiwan initially (since they are not yet WTO members). In addition, we do not assume that MFA quota elimination will automatically be extended to China. Instead, we consider these separately when we examine the implications of China and Taiwan both joining the WTO.

Figures 2, 3, and 4 illustrate Western Europe's and developing East Asia's total and bilateral trade patterns as they were in 1992 and as projected for 2010 after the implementation of the Uruguay Round. The most striking change is the increased importance of East Asia's developing economies for West European exports. Our projections suggest that by 2010 the region will pass North America as the most important regional destination for Western Europe's extra-regional trade, its share rising from 13 to 21 per cent. Not surprisingly, developing East Asia is also the most rapidly growing destination of exports from individual economies of East Asia. Hence, while the relative importance of East Asia for Western Europe grows dramatically, the relative importance of Europe for East Asia grows very little. This statement masks important growth in the absolute level of trade between developing East Asia and Western Europe though: as illustrated in Figure 4, we project a dramatic expansion in the volume of trade in this relationship as a result of the combined impact of economic growth in Asia and the implementation of the Uruguay Round Agreements.

4. Post-Uruguay Round policy reforms

We next turn to examine a number of post-Uruguay Round scenarios. Tables 8 and 9 present a comparison of the Uruguay Round implementation (due to be take place through to 2005) with additional possible post-Round liberalizations. These include:

- accession of China and Taiwan to the WTO;
- a trans-Atlantic initiative aimed at closer economic integration of Western Europe and North America (modelled as a preferential trade agreement);
- open regionalism in the APEC region (involving a reduction in trading costs as well as elimination of tariffs); and
- another WTO round, involving a 50 per cent reduction in tariffs as well as a reduction in trading costs valued at 2 per cent of trade.

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given the current state of data and theory. All we can do is reassure the reader that the projections presented here are relatively robust, qualitatively, with respect to alternative calibrations.

[5] See Francois, McDonald, and Nordstrom (1996, 1997) for applications involving explicit modeling of agricultural and MFA textile quotas as quantitative restraints.

Table 9 shows that implementation of the Uruguay Round would add nearly 1 per cent to global GDP by 2010, or $328 billion p.a. in 1992 dollars. This is bigger than the estimates produced by other studies using the GTAP model (e.g. Anderson et al. 1997a,b), mainly because the version of GTAP used in the present study includes the realities of imperfect competition and increasing returns to scale (but also because the present study is looking at 2010 rather than 2005 when the world economy would be smaller). WTO accession for China and Taiwan would add considerably to that gain, however. In our accession scenario we assume a 50 percent reduction in tariffs by China and Taiwan on an MFN basis, as well as the removal of non-tariff restrictions on China's exports of textiles and clothing. That degree of liberalization would add a further $66 billion per year or one-fifth more to the global economic welfare gains from the Uruguay Round. Even neighbouring economies in East Asia are projected to gain, despite being competitors with China and Taiwan in many markets. This contrasts with results in, for example, Anderson et al. (1997b), where assumptions of constant returns to scale and perfect competition ensure there is less scope for at least ASEAN economies to gain from China/Taiwan expansion through intra-industry specialization and indeed some were projected to lose slightly. The only projected loss from Chinese accession in the present study is a very slight one for other developing countries who face stronger competition in apparel markets from China. Western Europe is a major winner from Chinese WTO accession (adding almost one-third to its GDP gain from the Uruguay Round), as also are the United States and Japan.

The 'TAFTA scenario' assumes a preferential trans-Atlantic free trade agreement is implemented, as well as preferential trade faciliation measures yielding a reduction in trading costs equalling 2 per cent of the value of trade.[6] Such an agreement yields classic trade diversion effects, with European and North American gains generally accruing at the expense of the rest of the world, including East Asia. (It also yields investment diversion effects -- see Baldwin and Francois (1997) for further discussion.) The trade facilitation assumed is enough to ensure that the world as a whole is expected to gain, but the projected loss to the excluded economies is greater than the gain to North America.

In contrast, the 'APEC scenario', which involves open regionalism (and hence MFN-based tariff reductions), yields unambiguous gains to all regions. In this scenario we assume the developed economies of the APEC region honour their commitment to remove all trade barriers by 2010. The developing economies have until 2020 to meet their commitment to free trade, but for simplicity we assume they also reach that target by 2010. Should that eventuate, the gains to the global economy are huge, at $958 billion per year. This dwarfs the global gains from a TAFTA; and North America is nearly five times better off in this case. Even Western Europe gains sizeably from APEC, at $33 billion as compared with $55 billion p.a. from a TAFTA. And the rest of the world also gains from APEC, whereas all excluded regions would lose from a TAFTA. The two scenarios thus present contrasting implications of preferential regional integration and open regional integration. They also indicate that there will be large barriers to trade still remaining in the APEC region even after the Uruguay Round is fully implemented.

Finally, we present in the last column of Tables 8 and 9 the benefits of a hypothetical new WTO round of multilateral trade reductions which is assumed to be implemented by 2010. (Negotiations for some areas, such as agriculture, services and TRIPS, are required under the Uruguay Round agreements to begin by 2000.) This new round is assumed to involve a 50 per cent reduction in all post-Uruguay Round tariffs, and (as in the two previous regional reform scenarios) a reduction in trading costs equal to 2 per cent of the value of trade. For East Asia

[6] See Baldwin and Francois (1997). These trading costs estimates are based on recent assessments of the European single market programme and APEC initiatives.

(and North America), this yields benefits comparable to those from APEC. That is, completely free MFN trade within the Asia-Pacific would benefit those APEC economies by about as much as a 50 per cent MFN trade reform globally. For Western Europe, however, a new WTO round yields much greater gains than either a TAFTA or the APEC initiative: $183 billion compared with $55 billion and $33 billion p.a. in 2010. This is because Western Europe benefits more from its own tariff reductions in the new WTO round scenario than in the TAFTA scenario, and it also benefits more from tariff reductions by non-Asian trading partners in the new WTO round.

5. Conclusions

The historical evolution of bilateral trade and investment flows between Western Europe and East Asia seem likely to continue, according to the above numerical projections analysis conducted in the context of regional and global economic growth and Uruguay Round implementation. The results demonstrate, though, that several strategic issues will influence the prospective trade outcomes and their effects on economic welfare. One is the accession to the WTO of China and hence Taiwan. Another is the (now seemingly unlikely) prospect of a trans-Atlantic free trade agreement. A third is the extent to which the APEC economies can deliver on their promise to free their trade on an MFN basis of the next decade or so. Finally, a fourth is the challenge of delivering further MFN trade liberalization through a new WTO-sponsored multilateral round.

Several conclusions are worth highlighting from the projection exercises. First, both the Uruguay Round and the continuing rapid growth of East Asia's developing economies ensure that those economies will continue to increase their shares of Western Europe's trade. East Asia, by contrast, will not see a comparable rise in the share of its trade involving Western Europe. As East Asia's importance in world trade keeps rising, its intra-regional trade will also continue to rise in importance. Given the current low degree of European-East Asian integration, as reflected in Tables 4 and 6, this suggests there will remain ample room over the next decade for the ASEM process to contribute to trade and FDI growth between the two regions.

Second, while Western Europe is projected to benefit from the regional APEC liberalization initiative, European interests are much better served by drawing East Asia into another global WTO round than by waiting for improved market access from an MFN-based initiative in the APEC region. Europe's economic interests are also tied to fast-tracking the WTO applications for the former centrally planned economies, and especially China.

The estimates presented above are conservative in several respects: they do not include any liberalization of services trade and investment; nor do they include the key dynamic effects of reform elucidated in the new endogenous growth theory; and effects of numerous other dimensions of the Uruguay Round such as the TRIPs agreement also are ignored.

Finally, one other likely development that has not been mentioned above but will influence European-East Asian trade and investment flows is eastern enlargement of the European Union. Inviting the ten Central and East European former communist countries into the EU, while almost certainly a good thing for both east and west (see Baldwin, Francois and Portes 1997), would cause some EU trade and investment diversion away from East Asia, particularly in labour-intensive manufactures. The negative effect on real incomes in East Asia is estimated in one recent study to amount to less than 0.2 per cent of the region's GDP, however, depending on the extent to which sensitive products from Eastern Europe (food, textiles, clothing, steel) are allowed free access to EU markets (Baldwin and Francois 1996).

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Table 1: Relative importance of Europe, North America and East Asia in global GDP and trade, 1963 and 1996

(per cent)

	GDP		Trade[a]	
	1963	**1995**	**1963**	**1996**
Europe	34	35	50	48
NAFTA	45	28	18	18
East Asia	9	24	9	24
Rest of world	12	13	23	10
TOTAL	100	100	100	100

[a] Total of merchandise exports plus imports.

Source: Updated from Norheim, Finger and Anderson (1993) using World Bank (1997) and WTO (1997).

Table 2: Share of intra-regional trade in each region's total trade[a], 1928 to 1995

(per cent)

	1928	**1958**	**1968**	**1979**	**1990**	**1995**
Western Europe	51	53	63	66	72	69
Eastern Europe + FSU	19	61	64	54	36	19
North America	25	32	37	30	32	36
Latin America	11	17	19	20	15	21
Asia[b]	46	41	37	41	45	51
Africa	10	8	9	6	6	10
Middle East	5	12	8	6	8	8

[a] Total of merchandise exports plus imports.

[b] 'Asia' includes Australia and New Zealand plus the Southwest Pacific islands.

Source: Revised and updated from Norheim, Finger and Anderson (1993) using WTO (1996).

Table 3: Shares of regional GDP traded extra-regionally[a], 1928 to 1995

(per cent)

	1928	**1958**	**1968**	**1979**	**1995**
Western Europe	17	16	13	16	15
North America inc. Mexico	8	6	6	13	15
Asia[b]	17	16	14	16	14[c]
of which:					
Developing Asia	*22*	*19*	*20*	*28*	*34[c]*
WORLD	**15**	**13**	**12**	**19**	**16[c]**

[a] Total of merchandise exports plus imports.

[b] 'Asia' includes Australia and New Zealand plus the Southwest Pacific islands.

[c] 1993.

Source: Updated from Norheim, Finger and Anderson (1993).

Table 4: Regional shares in and growth of Europe's and Asia's trade[a], 1990 to 1995

(per cent)

	Western Europe	C. and E. Europe+FSU	North America	Asia[b]	WORLD
Distribution of regions' exports:					
Western Europe					
1990	70.2	3.7	8.0	8.6	100.0
1995	68.9	4.4	7.4	9.6	100.0
C. and E. Europe + FSU					
1990	42.5	38.7	2.1	7.5	100.0
1995	57.3	18.9	4.8	12.8	100.0
Asia[b]					
1990	19.3	1.7	24.4	45.1	100.0
1995	16.4	1.0	23.8	50.9	100.0
Regional shares of world trade (X + M):					
1990	48.6	3.2	16.9	21.1	100.0
1995	44.2	3.0	17.3	25.8	100.0
Growth in trade value (per cent pa, 1990-95):					
Western Europe					
Exports	5	9	5	12	6
Imports	5	10	5	8	5
C. and E. Europe + FSU					
Exports	10	-8	25	6	8
Imports	9	-8	3	-1	5
Asia[b]					
Exports	8	-1	8	16	12
Imports	12	6	10	16	12

[a] Total of merchandise exports plus imports.

[b] 'Asia' includes Australia and New Zealand plus the Southwest Pacific islands.

Source: Compiled from WTO (1996) data.

Table 5: Annual volume of inward and outward direct foreign investment, various regions, 1984 to 1995 (current US$ billions)

	1984-89		1990-94		1995	
	Inward	Outward	Inward	Outward	Inward	Outward
European Union-15	37.7	62.6	78.7	108.2	111.9	132.3
Other Western Europe	2.1	5.3	3.7	8.8	3.7	9.6
C. and E. Europe+FSU	0.0	0.0	3.8	0.2	12.4	0.3
Japan	0.0	20.8	1.6	29.3	0.0	21.3
Hong Kong	1.4	1.8	1.6	10.5	2.1	25.0
China	2.3	0.6	16.1	2.4	37.5	3.5
Other East Asia	6.0	2.7	15.9	7.2	22.7	13.0
North America	48.6	21.5	40.9	47.8	71.4	100.3
Australia/New Zealand	4.5	3.6	6.7	3.7	15.6	6.7
Rest of World	12.8	2.7	23.7	3.8	37.6	5.8
WORLD	**115.4**	**121.6**	**192.7**	**221.9**	**314.9**	**317.8**

Source: Compiled from United Nations (1996, Annex Tables 1 and 2).

Table 6: Regional shares (and their growth since 1980) in stocks of outward and inward foreign direct investment, EU-12, East Asia, and North America, 1992[a]

(per cent)

	EU-12	**East Asia**	**North America**	**Rest of world**	**TOTAL**
OUTWARD FDI FROM:					
European Union-12	48 (14)	4 (-2)	28 (-5)	18 (-6)	100
East Asia	16 (7)	24 (-11)	40 (14)	15 (-9)	100
North America	38 (4)	11 (5)	23 (4)	24 (-4)	100
[Share of world FDI inward stock	*40*	*10*	*28*	*22*	*100]*
INWARD FDI INTO:					
European Union-12	49 (12)	4 (2)	25 (-15)	20 (-1)	100
East Asia	14 (-5)	48 (6)	19 (-4)	17 (12)	100
North America	44 (5)	19 (15)	23 (-18)	12 (-3)	100
[Share of world FDI outward stock	*45*	*16*	*30*	*9*	*100]*

[a] Numbers in curved parentheses are the percentage changes in the shares of FDI from 1980 to 1992.

Source: Compiled from Bora (1996) and UNCTAD (1996, Annex Tables 3 and 4).

Table 7: Rates of protection and GDP growth assumed for 1992-2010

	Average Pre-Uruguay Round tariff (%)	**Average Post-Uruguay Round tariff (%)**	**Annual GDP growth rate (%)**
Indonesia	15.8	14.5	6.6
Malaysia	17.2	10.2	9.0
Philippines	31.0	23.4	5.1
Thailand	40.3	29.6	8.0
China, mainland	35.0	35.0	7.8
Hong Kong & Singapore	1.3	0.7	6.1
Taiwan	14.6	14.6	6.1
Korea, Rep.	24.3	12.7	6.7
Japan	21.3	14.3	2.8
Australia and New Zealand	12.7	8.9	3.4
North America (inc. Mexico)	5.3	4.1	2.6
Western Europe	6.5	5.3	2.5
C. & E. Europe & FSU	9.9	8.5	3.5
Rest of world	24.4	22.8	3.5

Sources: GTAP database (McDougall 1997) and World Bank projections (see Anderson et al. 1997).

Table 8: Real income effects of trade liberalization in 2010

(based on projected GDP and measured in billions of 1992 US dollars)

	Uruguay Round	**China/Ta in WTO**	**TAFTA**	**APEC**	**New WTO round**
Indonesia	3.6	0.9	-1.1	1.3	23.0
Malaysia	86.2	1.8	-5.8	133.7	171.3
Philippines	8.7	0.1	-0.3	21.1	19.3
Thailand	40.5	3.0	-3.5	196.9	184.4
China, mainland	4.1	7.8	-1.8	93.5	116.7
Hong Kong & Singapore	11.1	9.8	-1.0	79.1	64.8
Taiwan	9.6	11.3	-1.3	58.0	55.4
Korea, Rep.	28.1	2.9	-1.4	57.2	64.8
Sub-total, developing East Asia	**191.9**	**53.8**	**-16.2**	**640.8**	**699.7**
Japan	58.5	9.6	-3.5	155.6	140.3
Australia and New Zealand	-0.2	0.5	-0.4	4.9	8.7
North America (inc. Mexico)	28.0	8.6	22.4	105.3	130.3
Western Europe	32.7	9.7	55.5	32.5	182.7
C. & E. Europe & FSU	0.4	0.1	-0.6	0.2	16.7
Rest of world	17.1	-0.2	-5.4	18.9	179.0
TOTAL, world	**328.4**	**66.0**	**51.7**	**958.2**	**1,357.5**

Source: Authors' model results.

Table 9: Real income effects of trade liberalization in 2010

(percent of projected GDP)

	Uruguay Round	**Chinese/Ta in WTO**	**TAFTA**	**APEC**	**New WTO Round**
Indonesia	0.8	0.2	-0.3	0.3	5.1
Malaysia	35.2	0.5	-1.7	39.1	50.1
Philippines	7.3	0.1	-0.3	16.1	14.8
Thailand	10.4	0.7	-0.8	45.1	42.2
China, mainland	0.3	0.5	-0.1	6.4	8.0
Hong Kong & Singapore	3.2	2.6	-0.3	20.9	17.1
Taiwan	1.6	1.8	-0.2	9.2	8.8
Korea, Rep.	2.9	0.3	-0.1	5.7	6.5
Japan	1.0	0.2	-0.1	2.7	2.4
Australia and New Zealand	0.0	0.1	-0.1	0.8	1.5
North America (inc. Mexico)	0.3	0.1	0.2	1.0	1.3
Western Europe	0.3	0.1	0.5	0.3	1.6
C. & E. Europe & FSU	0.1	0.0	-0.1	0.0	1.8
Rest of world	0.4	0.0	-0.1	0.4	4.1
TOTAL, world	**0.9**	**0.2**	**0.1**	**2.5**	**3.5**

Source: Authors' model results.

Figure 1: Regional shares of global GDP, 1992 and 2010

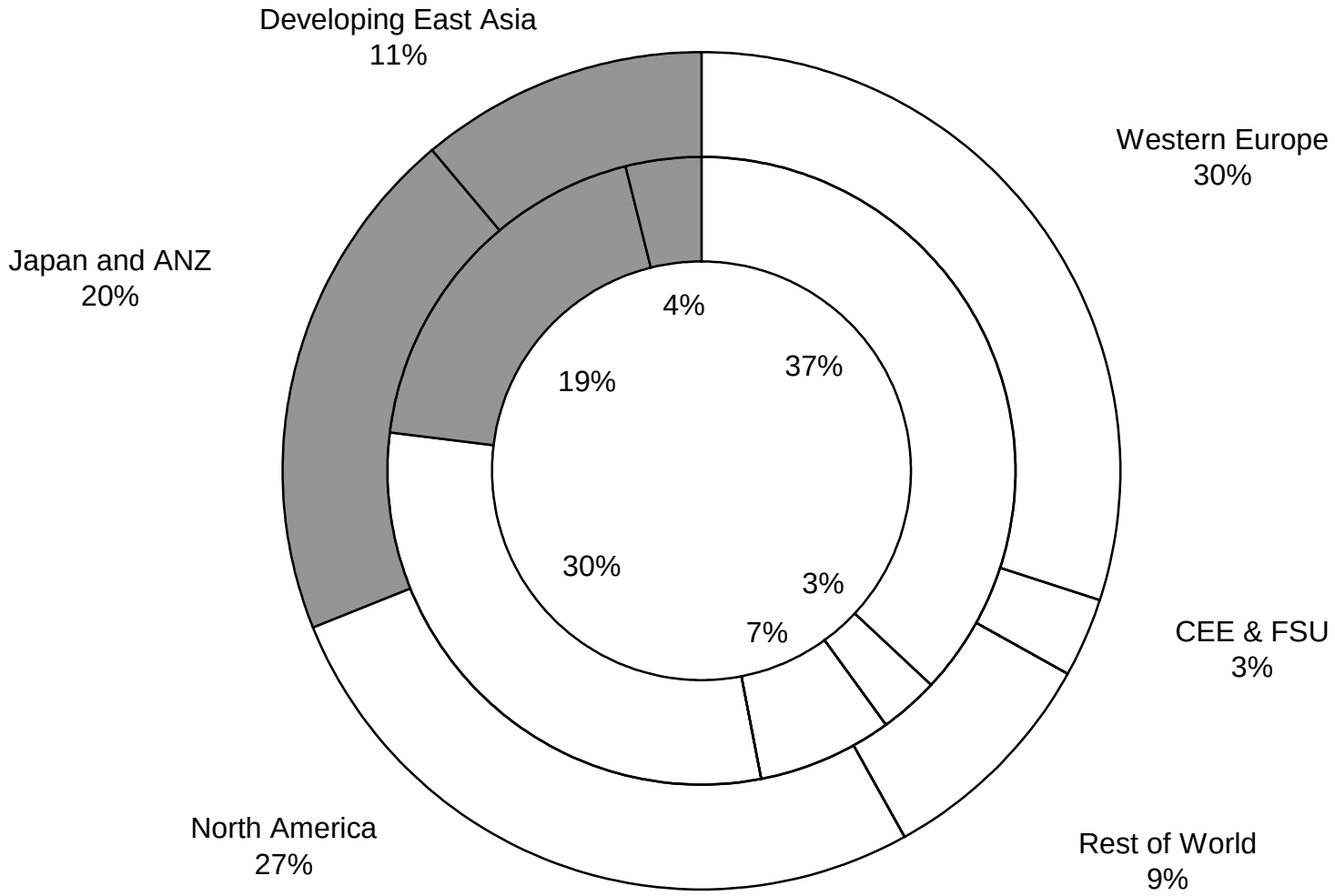

Figure 2: Regional shares of Western European extra-regional exports, 1992 and 2010

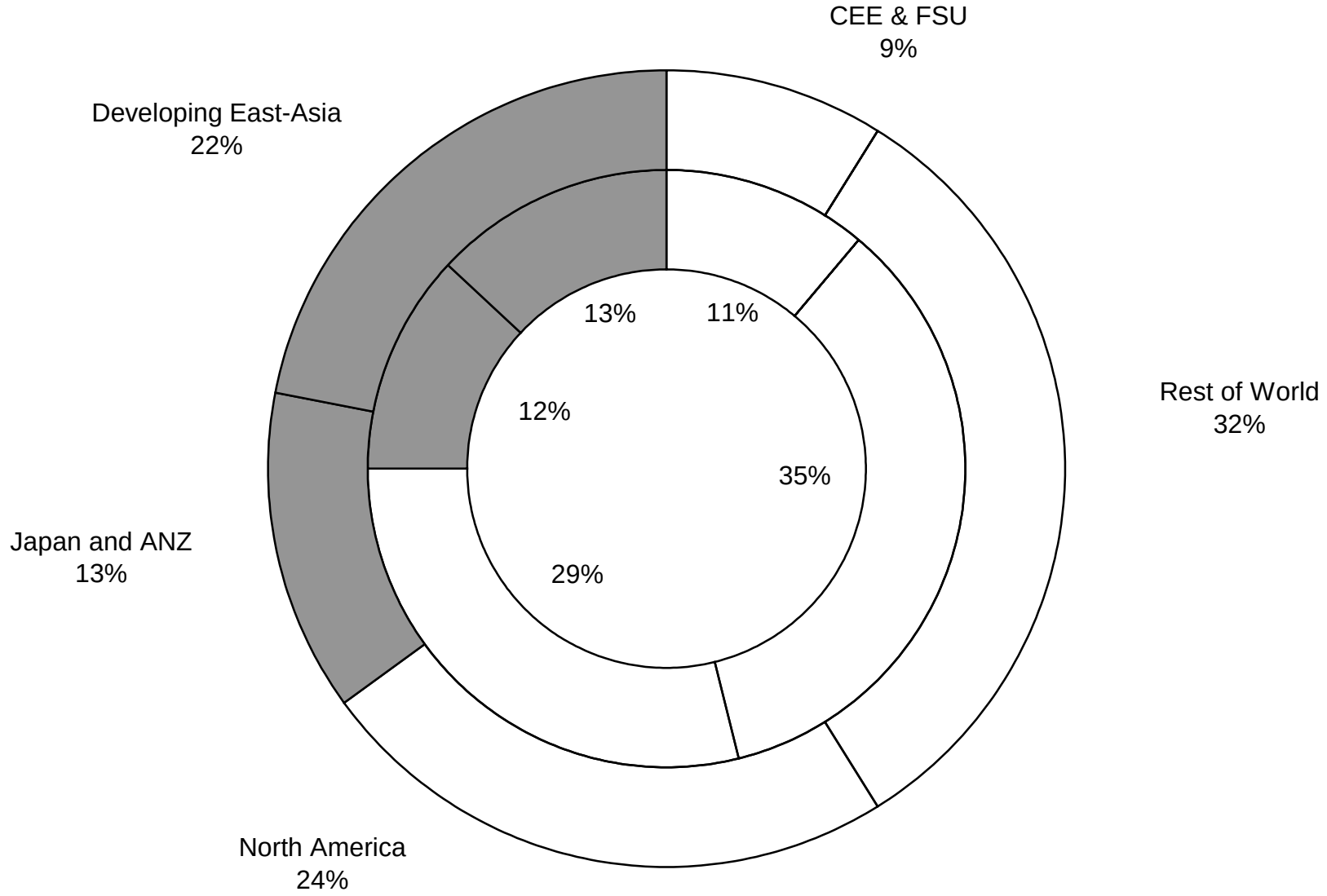

Figure 3: Regional shares of developing East Asia's exports, 1992 and 2010

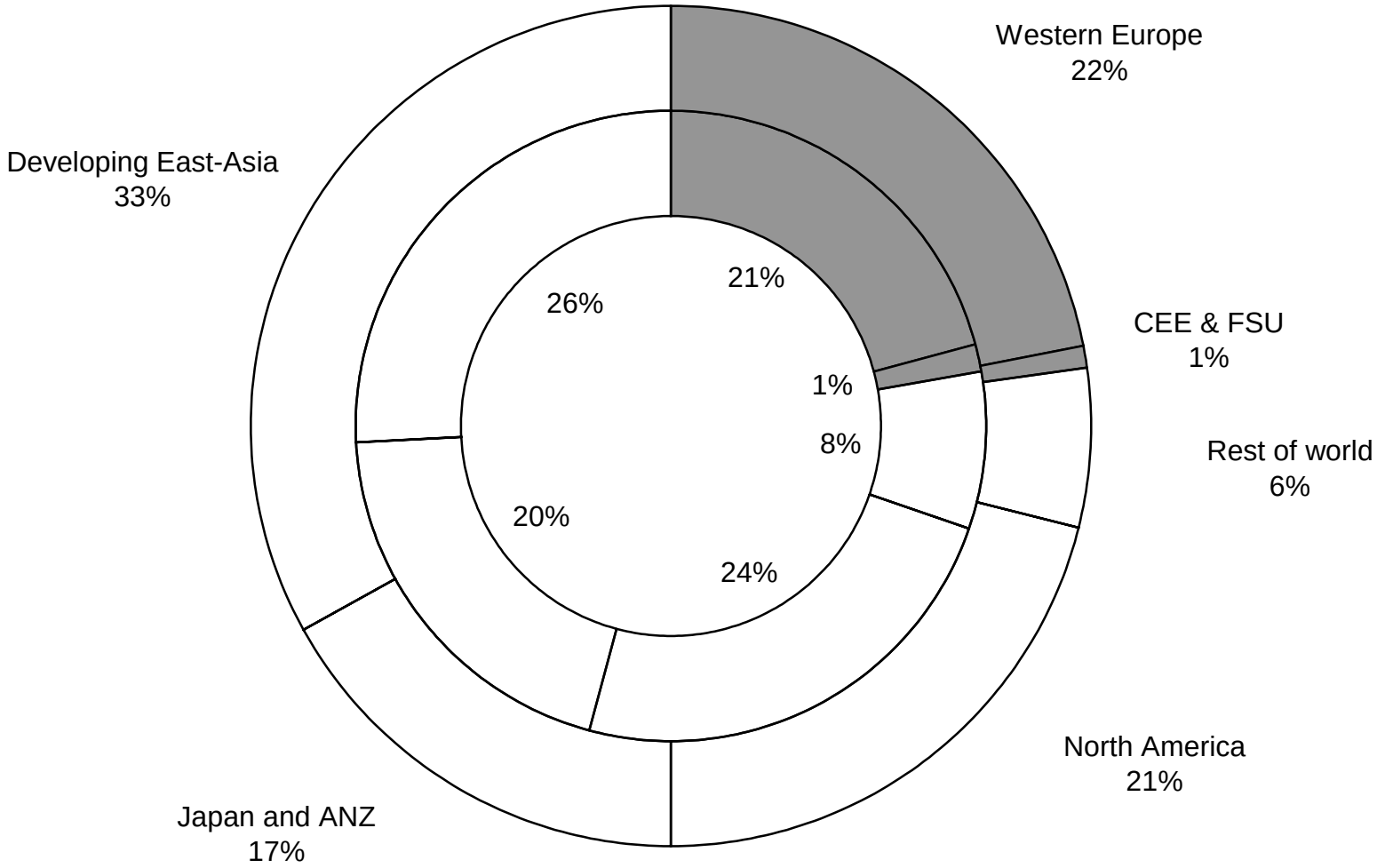

Figure 4: Growth in Western European - developing East Asian trade, 1992 to 2010