Hungary
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Foreign Trade Issues in the Context of Accession to the EU

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Bartłomiej Kaminski

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Foreword

The Poverty Reduction and Economic Management Unit in the World Bank's Europe and Central Asia Region has been undertaking a series of analytical work on issues pertinent to the economies in the region. These issues include: transition issues; issues of economic integration pertinent for the Central and Eastern Europe countries which are candidates for accession to the European Union; poverty issues; and other economic management issues. The analytical work has been conducted by staff of the unit, other Bank staff as well as specialists outside of the Bank.

This technical paper series was launched to promote wider dissemination of this analytical work, with the objective of generating further discussions of the issues. The studies published in the series should therefore be viewed as work in progress.

The findings, interpretations and conclusions are the authors' own and should not be attributed to the World Bank, its Executive Board of Directors, or any of its member countries.

PRADEEP MITRA
DIRECTOR
POVERTY REDUCTION AND ECONOMIC MANAGEMENT UNIT
EUROPE AND CENTRAL ASIA REGION
THE WORLD BANK

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Executive Summary

Hungary's path to a functioning market economy has been unique. Even on the eve of the collapse of Communism, Hungary had a long record of decentralization efforts dating back to the market socialism reforms of 1968. By 1989 Hungary had a number of institutions of market provenance, including a two-tiered banking sector and a modern taxation system introduced with the support of the IMF. Nonetheless, the country had no competitive markets, as the economic regime was largely based on administrative bargaining. Because of its small size, Hungarian prosperity was also heavily dependent on international trade, including trade with noncommunist countries. Although with time the state monopoly over foreign trade was substantially weakened, it was not completely removed by the end of the 1980s. Exporters were allowed to retain some portion of their hard currency earnings, but their spending decisions were largely controlled by the state. Domestic producers, as in other Centrally Planned Economies (CPEs), were shielded from international competition. On the other hand, SOEs (State Owned Enterprises) enjoyed considerable autonomy, allowing for the development of managerial cadres with skills transplantable to a market environment. These features distinguish Hungary from most other CPEs, although it shared with them rather dismal economic growth throughout the 1980s.

The Hungarian path of industrial restructuring—as observed through the lens of export performance—has followed the same pattern as other successful transition economies, though proceeding at a faster rate. During the first stages of the transition, most exports came from firms with established international links and through redirection...
of exports from former Council for Mutual Economic Assistance (CMEA) markets. Subsequently, sustainability of foreign trade and economic growth depended on facilitating the entry of "second generation" firms, that is, those which were either newly established or successfully restructured. Thanks to the supply of high quality services and a favorable investment climate, the shift to second generation firms, mostly foreign−owned, was already well advanced in Hungary before 1995. The revival of stalled privatization in the second half of 1995 has clearly accelerated this trend.

It seems that the rapid pace of turnaround, following a dramatic contraction in exports in 1993, has had a great deal to do with both the emergence of second generation firms and foreign participation. Foreign−owned firms tend to be more export oriented and more profitable than domestic−owned firms. Thanks to a friendly environment for FDI since the outset of transition, Hungary has been the most successful transition economy in terms of attracting foreign investors. From 1990 to 1997, Hungary absorbed approximately one−half of all foreign capital invested in Central Europe. Such inflows were not concentrated in the recent past (as in Poland), but were already large in terms of GDP from 1990 to 1994. FDI has played a pivotal role in reintegrating the Hungarian economy into international markets. A huge portion of investment has come from large multinational corporations (MNCs) with global networks of production and marketing. As a result, a significant share of Hungary's domestic business activity has been incorporated into these networks. Moreover, most FDI has come to Hungary, not as a way of jumping trade barriers, but to take advantage of the overall economic environment including location, production, and transaction costs. The data on profitability and export−orientation of foreign owned firms appear to confirm this observation. The proportion of FDI in inefficient industries supported by unearned rents, which usually disturbs the social and political atmosphere, seems to be negligible.

After a decline in 1993, the export performance has again been very impressive. Exports, helped by recovery in import demand in the EU, soared in 1994 and continued to grow at double−digit rates between 1995 and 1997. Changes in its composition bear out substantial progress in industrial restructuring. Exports have become more diversified with a notable shift toward high value−added products. The share of unskilled labor−intensive products in exports has fallen, along with the share of environmentally dirty products. Considering that these impressive results occurred during a period of a rather dramatic reversal in foreign trade liberalization, one may suspect that the actual potential is significantly larger. It seems that export expansion might have been even more impressive had there been more open access to Hungarian markets.

With progress in industrial restructuring demonstrated by the evolving composition of exports, Hungary seems well poised to take advantage of becoming part of the European single market. Two threats, however, remain.

First, with inflation rates still hovering at double digit levels, large external debt, and the political temptation to increase spending for favored constituencies, macroeconomic stability remains precarious. A slippage in commitment to macroeconomic adjustment might easily trigger a much deeper crisis than that of 1993−94, simply because of a significantly larger presence of portfolio investment as well as a much greater reliance on foreign trade as manifested by its growth in relation to GDP.

Second, although the proliferation of industrial free−trade zones has kept FDI flowing, the emergence of a pan−European system of rules of origin, which Hungary has signed on to, will effectively remove duty drawback schemes by the end of 1998.1 Products from free−trade zones, which became especially popular between 1994 and 1997, will lose preferential access to pan−European markets if duties paid on imports of inputs are reimbursed. The danger is that with attractiveness of free−trade zones fading, FDI inflows will also decline. A shift to lower EU external MFN tariffs on industrial imports might counteract this threat.
As a small country, Hungary might benefit enormously from unilateral liberalization. Nonetheless, there has been strong political resistance—except in the immediate aftermath of the collapse of communism in 1990—to follow the path of liberalization. Because of pressure from both the WTO and Hungary's preferential partners (mainly the EU), some restrictions inconsistent with international rules, such as customs and administrative fees, have been removed, at least on imports from WTO members. Hungary, however, still adheres to quantitative restrictions on imports of some industrial products (the so-called global consumer quota); tariff rates on these products are substantially higher than in the EU. The global consumer quota seems to be a policy aberration, offering producers rents at the expense of consumers, and should be abolished.

In terms of tariffs on manufactures, the bottom line of unilateral liberalization is the adoption of MFN tariff rates of the EU. A move in that direction could yield several tangible benefits due to increased competition in oligopolistic markets and lowered prices of imports on products not manufactured domestically. It could provide an extra boost to exports to nonpreferential trading partners, thus setting ground for a greater diversification of foreign trade. The adoption of EU rules would also terminate the existing discrimination against products from non-WTO member countries, mainly former Soviet republics.

**Reorientation of Foreign Economic Relations: A New Pattern of Engagement**

The demise of whatever was left of central planning, coupled with rapidly declining Soviet capability to sustain "soft" settlements in intra-CMEA trade, provided the catalyst for a reorientation of Hungary's commercial relations. This eventually led to the demise of the CMEA. In the second half of the 1980s, the combination of falling oil prices in intra-CMEA trade and cuts in Soviet deliveries encouraged CMEA members to restrain exports to the FSU (Former Soviet Union) and to increase exports to hard-currency markets. This heralded a return to trade patterns determined by economic, rather than political, considerations. The share of former CMEA trade fell from 60 percent in 1986 to 42 percent in 1989 and 22 percent in 1991.

Despite long term declining trade with the former CMEA, the challenge of readjustment of trade patterns in the early 1990s was formidable. Consider that the previous two decades had witnessed declining competitiveness in Hungarian exports to Western markets. Indeed, many Hungarian firms operated in "soft" CMEA markets devoid of competition and dominated by products of shoddy quality. Furthermore, although the price of oil supplied by the former Soviet Union—based on a moving five-year average—was close to the world price, Hungarian exports would purchase more oil there than elsewhere. In addition, the shift to convertible currencies in CMEA trade, combined with a rapidly falling import demand in the FSU, amounted to a significant deterioration in Hungary's terms of trade. Trade with the FSU suffered the most.

Hungary has successfully accommodated these challenges. The volume of total exports fell by 5 percent in 1991, remained steady in 1992, took a dive of 13 percent in 1993, and increased by 17 percent in 1994. Exports from 1994 to 1995, exceeded the 1989 level. About 70 percent of Hungary's exports now go to industrialized countries, which is to be expected given Hungary's proximity to EU markets. The changes on the import side were even more pronounced. As a result, the process of geographic reorientation to market-driven patterns of foreign trade was quickly completed.

The EU countries, with their high GDP and geographical proximity (including EFTA members Austria, Finland and Sweden, who joined the EU in 1995), have quickly become Hungary's largest trading partners. In 1989, the 15 EU countries accounted for 34 percent of Hungarian total exports, rising to 50 percent in 1991. Following the entry into force of trade provisions of the European Economic Agreement (EA) in 1992, this share rose to 80 percent in 1997. Clearly this indicates a massive reorientation of Hungary's exports towards EU markets.
Integration into EU Markets: Export Performance

The scope and depth of a country’s integration into EU markets offers important insights about the ability of its firms to compete in a Single Market. With the share of the EU in its trade turnover amounting to around two-thirds, Hungary is actually more integrated into the EU than some EU members themselves. Note that inter-EU trade was on average 61 percent of total external trade from 1990 to 1996. The intensity of competition from EU imports in Hungarian markets has increased since 1995. Since then tariffs (extended in 1995 to industrial products not covered by reductions when the interim trade component of the EAwent into force in March 1992) have been slashed by 20 percent annually, as stipulated by the EA. It thus appears that Hungarian firms have been quite successful in a competitive environment. The opening of markets has not triggered a wave of bankruptcies.

How well can Hungarian firms compete in EU markets? Examining Hungary's export performance in these markets since the beginning of transition offers an answer. If Hungary were able to expand its presence in EU markets for higher value-added products, then one might be optimistic about the future performance of Hungarian firms, foreign or locally owned, within a Single Market. This section of the paper (i) identifies groups of trend setting products in Hungarian EU-directed exports; (ii) examines changes in values of RCA (Revealed Comparative Advantage) indices and the level of processing of commodities; (iii) discusses changes in factor and environmental intensities of Hungarian exports to the EU; and (iv) assesses future prospects. The empirical evidence analyzed here suggests that Hungary would be able to withstand the competitive pressures of a Single Market while simultaneously enjoying a rising standard of living.

Expansion in Exports to the EU: Two Phases

One can distinguish two different phases in Hungary's exports to the EU: from 1989 to 1992, and from 1994 to 1997 (table 1). During the first phase, the expansion in exports to the EU was mainly driven by a redirection of manufactures exports to Western, mostly EU, markets. The initial impetus for this phase was the collapse of former CMEA markets and the liberalization of import and exchange rate regimes. The value of exports increased by 84 percent between 1989 and 1992. This expansion lost steam in 1993 (when the value of EU-oriented exports fell by 12 percent), but exports subsequently regained their dynamism between 1994 and 1997, with the their value increasing by 132 percent.

In the late 1980s, the FSU received approximately 40 percent of Hungary's total exports of machinery and transport equipment, whereas the EU received 10 percent. The proportion, however, was reversed by 1991 with the EU's share increasing to about 35 percent, and the FSU's falling to 19 percent. The contraction of 20 percent in the value of machinery exports between 1988 and 1991 does not explain the change, as the value of EU-destined exports more than doubled over this period. In 1992, the share of the FSU fell further, to 16 percent, while the value of total machinery exports was flat. Clearly not all exports could be redirected to the EU.

During the second phase, it seems that exports to the EU, averaging about 24 percent per year, came mostly from restructured industrial capacities ("second generation" firms, either
Table 1  Two Phases of Hungarian Export Expansion  
(Annual Changes in Percent)

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<tbody>
<tr>
<td>Hungarian exports to EU*</td>
<td>30.5</td>
<td>20.0</td>
<td>12.7</td>
<td>184</td>
<td>−11.7</td>
<td>25.8</td>
<td>37.4</td>
<td>12.6</td>
<td>19.2</td>
<td>232</td>
</tr>
<tr>
<td>In terms of share in EU imports**</td>
<td>10.3</td>
<td>15.7</td>
<td>9.4</td>
<td>140</td>
<td>−5.5</td>
<td>14.1</td>
<td>17.0</td>
<td>9.5</td>
<td>13.2</td>
<td>165</td>
</tr>
<tr>
<td>Total exports**</td>
<td>−0.2</td>
<td>6.2</td>
<td>5.2</td>
<td>111</td>
<td>−16.8</td>
<td>20.2</td>
<td>20.3</td>
<td>2.2</td>
<td>21.2</td>
<td>179</td>
</tr>
</tbody>
</table>

Sources: *Derived from data reported by EU to UN COMTRADE database; ** Derived from Hungarian Central Statistical Office (1997).

restructured or established after the collapse of central planning). The value of exports to EU countries increased by 132 percent, almost 50 percentage points more than during the first phase. Economic recovery has not slowed this growth; if anything, the recovery was export-led. Rapidly growing export earnings and inflows of foreign capital have allowed an increase in imports, thereby providing higher quality products for both consumption and investment. As such, foreign trade has been a bright spot in Hungary's transition to competitive markets and has contributed to Hungary's overseas economic performance.

How does the Hungarian export growth compare with other first-wave candidates for EU accession? As can be seen from data tabulated in table 2, Hungary is the second largest exporter among economies of this group. Leaving aside comparison with Estonia's initially volatile reintegration into the EU markets, Hungary registered the highest growth rates over 1995–97. It caught up the Czech Republic in terms of value of exports in 1997 and has been a top reformer among those countries.

Export Basket: The Shift toward Manufactures

Has this expansion in commercial ties with the EU had any discernible impact on the composition of exports? First, the expansion of exports in both the 1990–92 and 1994–97 phases has been driven by manufactures; their value increased about 5.6 times between 1989 and 1997 with the increases of 118 percent in the first phase and 177 percent during the second phase. The share of manufactures in Hungarian EU-oriented exports increased from 55 to 68 percent between 1989 and 1992, and from 71 to 85 percent during the second phase. The driving force in Hungarian exports has been machinery and transport equipment (SITC 7).

Table 2 Hungarian Exports to the EU in a Comparative Perspective, 1992–97

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<tr>
<td>Value of EU imports from:</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Czech Republic</td>
<td>2,843</td>
<td>3,476</td>
<td>4,050</td>
<td>5,513</td>
<td>6,498</td>
<td>8,604</td>
<td>11,597</td>
<td>12,176</td>
<td>13,179</td>
</tr>
<tr>
<td>Estonia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>344</td>
<td>308</td>
<td>739</td>
<td>1,314</td>
<td>1,579</td>
<td>1,870</td>
</tr>
<tr>
<td>Hungary</td>
<td>3,705</td>
<td>4,834</td>
<td>5,799</td>
<td>6,537</td>
<td>5,773</td>
<td>7,260</td>
<td>9,974</td>
<td>11,231</td>
<td>13,398</td>
</tr>
<tr>
<td>Poland</td>
<td>5,167</td>
<td>7,705</td>
<td>8,781</td>
<td>10,274</td>
<td>9,834</td>
<td>11,934</td>
<td>15,260</td>
<td>15,678</td>
<td>16,049</td>
</tr>
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Export Basket: The Shift toward Manufactures
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</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>52</td>
<td>63</td>
<td>73</td>
<td>100</td>
<td>118</td>
<td>156</td>
<td>210</td>
<td>221</td>
<td>236</td>
</tr>
<tr>
<td>Estonia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>100</td>
<td>90</td>
<td>215</td>
<td>382</td>
<td>459</td>
<td>544</td>
</tr>
<tr>
<td>Hungary</td>
<td>57</td>
<td>74</td>
<td>89</td>
<td>100</td>
<td>88</td>
<td>111</td>
<td>153</td>
<td>172</td>
<td>205</td>
</tr>
<tr>
<td>Poland</td>
<td>50</td>
<td>75</td>
<td>85</td>
<td>100</td>
<td>96</td>
<td>116</td>
<td>153</td>
<td>172</td>
<td>156</td>
</tr>
<tr>
<td>Slovenia</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>100</td>
<td>153</td>
<td>186</td>
<td>233</td>
<td>227</td>
<td>218</td>
</tr>
</tbody>
</table>


Their share in total EU–directed exports increased from 12 percent in 1989 to 18 percent in 1992 and to 48 percent in 1997 (see figure 1). Between 1989 and 1992 the value of these exports increased by 174 percent; in the second phase the value of these exports grew by 444 percent.

Second, contrary to a widespread perception, there was no collapse of EU–destined agricultural exports. Bad weather appears to be responsible for their contraction in terms of value in both 1992 and 1993. Although the export share of agricultural products (foods and agricultural materials) fell from 31 percent in 1989 to 10 percent in 1997, two elements should be taken into account. The EU’s imports of agricultural products from non–EU countries were stagnant during this period, and the value (not necessarily the volume) of these exports actually increased. The share of Hungarian exports in EU imports of agricultural products fell only slightly, by 0.08 percent from 1.64 to 1.56 percent in 1997. The value of EU imports of agricultural products was 30 percent higher in 1996 than in 1989, whereas the value of Hungarian exports increased by 20 percent. The value of Hungarian exports of agricultural materials, for which EU markets are protected less than for foods, grew less than all food products.

Change in Competitiveness in EU Markets

The opening of the economy, combined with increasing globalization of production triggered by reduced costs of transportation and information, usually leads to greater specializa–
tion and improved competitiveness. Because of a changed institutional environment and a favorable climate for foreign investment, the capacity of Hungarian firms to compete internationally has significantly improved. In fact, they have outperformed suppliers from other countries. The share of products made in Hungary in EU imports from countries outside the union (EU external imports) increased each year (except 1993) between 1989 and 1997.

Table 1 in the appendix shows the share of Hungarian products in the EU's external imports from 1989 to 1996. The years of the highest Hungarian share are predictable. With the progress in industrial restructuring, the elimination of energy subsidies, and rising wages, one would expect declining performance in energy intensive and labor intensive products. In fact, this seems to have occurred. For some product categories, including food products, agricultural materials, and textile fibers, the shares peaked in 1991. Other products had maximum share in 1992: these include chemicals (although since 1994 their share has been on the increase), leather goods (which captured 5 percent of EU imports) and footwear (with an almost 3 percent share). For all other product groups, EU shares were the highest in 1997.

Hungary no longer seems to be as vulnerable to vicissitudes in the business cycle as it was in the 1980s. The number of markets (in terms of four-digit SITC product categories) where Hungarian exporters had a share larger than 20 percent of EU external imports fell from 12 in 1989 to 8 in 1993 and 1996, and increased to 13 in 1997. But the number of markets dominated by suppliers from Hungary, that is, with shares exceeding 70 percent of EU external imports, increased from one in 1989 and 1993 to six in 1996, and fell to four in 1997. The number of product categories with a share between 10 and 20 percent increased from 15 to 17 and then to 23 over same period. Between 1993 and 1996 Hungarian exports with a share below 5 percent in EU external imports had fallen from 65 to 59 percent (table 3). This indicates a significant increase in the number of Hungarian products with more than a 5 percent share of EU external imports—from 35 percent in 1989 to 41 percent in 1997.

Although most engineering products (which have been successful in EU markets) outperforming other suppliers)
were already manufactured by 1989, the expansion did not consist merely in shipping more of the products already produced. This again points to a significant progress in economic restructuring. Compare the four−digit SITC.7 items, which accounted for more than 10 percent of EU imports in 1989, with those in 1997. In 1989 there were only two SITC.7 items that met the 10 percent criterion: leather working machinery (7172) and electric light bulbs (7292). The share of leather machinery fell to 2 percent in 1996 and rebounded in 1997, while the share of electric light bulbs in EU imports grew to 21 percent. The share of buses (7322) was 9.8 percent in 1989 and declined slightly to 7 percent in 1997. Three other four−digit items SITC.7 with a share in EU external imports exceeding 10 percent were also exported in 1989 but in tiny amounts. On the other hand, the share of piston engines (7115) was 0.1 percent in 1989 and 27 percent in 1997; that of insulated wire cable was 1 percent and 15 percent respectively; and that of trailers (7333) increased from 3.5 to 18 percent. In short, there has been a net increase in four−digit SITC.7 exports from Hungary.

Despite the contraction in the value of EU external imports of many agricultural products, Hungarian suppliers have been successful in retaining and expanding their market shares in some areas. The number of food products with a Hungarian share above 70 percent in EU external imports rose from one in 1989 (sausages−SITC. 0134) and 1993 to six in 1996,9 and fell to two in 1997, which suggests healthy diversification and an increase in competitiveness.

**Factor Intensities of EU−oriented Exports over 1989–97**

According to the Heckscher−Ohlin Theorem, commodity trade patterns reflect differences in comparative advantage as determined by different factor endowments among countries. A country tends to export those goods that use factors in relative abundance—an outcome of a competitive market mechanism efficiently allocating resources. Exploring a full causal chain that links factor endowments, comparative advantage, and trade patterns is not relevant for this discussion; we will instead investigate the broad changes in relative factor intensities as revealed in their exports to the EU.

To test the Heckscher−Ohlin Theorem, Krause organizes commodities classified in the SITC into four groups reflecting their relative factor intensities.10 These groups are natural resource−intensive products; unskilled labor−intensive products; technology−intensive products; and human capital−intensive products.11 The first two

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**Table 3 Significance of Hungarian Exports into the EU in 1989, 1993, and 1997**

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<tr>
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<th>1989</th>
<th>1993</th>
<th>1997</th>
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<tr>
<td>Number of product categories with a share in EU imports exceeding 10% (4 digit SITC. Rev. 1)</td>
<td>27</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>Value of exports (million of US$)</td>
<td>654</td>
<td>845</td>
<td>4,418</td>
</tr>
<tr>
<td>Share in total EU−destined exports (in percent)</td>
<td>17.65</td>
<td>14.64</td>
<td>33.0</td>
</tr>
<tr>
<td><strong>Memorandum:</strong> Share of exports of products with a share in EU imports below 5% in Hungarian EU−oriented exports (in percent)</td>
<td>65</td>
<td>68</td>
<td>56</td>
</tr>
</tbody>
</table>

*Source:* Derived from SITC four−digit data as reported by the EU to the UN COMTRADE data base.
groups represent lines of production characterized by low value added, high natural resource-intensiveness, and simple technologies. They account for a dominant share of exports in countries with a low degree of industrialization. While the line dividing the technology- and capital-intensive groups is imprecise, both groups contain products requiring more sophisticated inputs than found in the first two groups.12

Hungary has a labor force that can theoretically supply the needs of all four Heckscher-Ohlin commodity groups. Given its large pool of relatively low-cost labor and moderate climate, it is not surprising that Hungary produces mostly labor and natural resource intensive agricultural goods. There is also an abundance of highly skilled labor (relative to Hungary's GDP per capita) to produce human capital-intensive goods. In addition, the relatively high quality and degree of scientific education would lead one to expect better-than-average performance in human capital-intensive products. With some exceptions, Hungarian exports seem to corroborate these expectations raised by an overview of its labor force.

Developments during the initial stages of the transition confirmed these expectations but with a significant delay. The export expansion was initially driven mainly by unskilled labor-intensive manufactures. The adjustment to international markets in terms of factor intensities has gone through two stages, which in one respect overlap with the earlier identified phases of Hungary's export performance. The crucial year was 1993, when the beginning of

<table>
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<th>Table 4</th>
<th>The Composition of Hungarian Exports to the EU According to Factor Intensities, 1989–97</th>
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<tbody>
<tr>
<td>Natural-resource intensive</td>
<td>46.2</td>
</tr>
<tr>
<td>Unskilled-labor intensive</td>
<td>18.8</td>
</tr>
<tr>
<td>Technology-intensive</td>
<td>19.3</td>
</tr>
<tr>
<td>Human-capital intensive</td>
<td>12.9</td>
</tr>
</tbody>
</table>

Source: Derived from the UN COMTRADE database as reported by the EU.

Another development that seems to defy predictions based on Hungary's initial performance is a steady growth in the share of technology-intensive products. These products are also capital intensive, and capital would seem to be scarce relative to labor. Furthermore, one would expect that some firms, faced with the contraction in domestic and former CMEA import demand, would be initially successful in redirecting their sales of engineering products to EU markets. Although such expansion should have quickly lost momentum, this did not happen in Hungary; its share of technology-intensive products has been steadily expanding, increasing from 19 percent in 1989 to 44 percent in 1997. By contrast, Poland's share of equivalent exports contracted between 1992 and 1995, and Slovenia's remained flat. Clearly, Hungary's success in attracting high quality flows of foreign investment has contributed to this outcome.

Aside from the profile of labor-intensive and technology-intensive products, development in Hungary's exports have confirmed the existence of severe distortions inherited from the past. Contrast the 1989 export basket with
that of 1997, in terms of factor intensities. First, despite low wages, labor-intensive products accounted for barely 32 percent of total exports in 1989. This share subsequently grew to 52 percent in 1993 and fell to 43 percent in 1997 because of a substantial contraction in the share of low-skilled labor-intensive products. Second, low value added natural resource-intensive products and unskilled labor-intensive products accounted for two-thirds of EU-directed exports in 1989. This share started to decline precipitously around 1993–94. It fell by 7 percentage points in 1995 and 3 percentage points in 1996 to 41 percent and 33 percent in 1997. Between 1990 and 1992, the driving force of this change was the relative decline in exports of agricultural products, accounting for almost 70 percent of resource-intensive products. High value-added, technology-intensive, and human capital-intensive products dominated the 1997 export basket; the dramatic acceleration of engineering products, machinery, and capital equipment from 1994 to 1997 was responsible for this change.

Indeed, calculations of Hungary's RCA indices in EU markets further bolster these observations. While both technology and human capital-intensive products were initially at a comparative trade disadvantage, that situation has been reversed. The RCA index of skilled labor products exceeded unity first in 1990, and between 1992 and 1997 increased from 1.06 to 1.46 (appendix table 2.A). Their share in EU imports more than tripled over this period, increasing to 2.2 percent (appendix table 2.B). Although from a lower base, technology intensive products have recorded even more impressive gains. The RCA index rose by 89 percent from 0.61 to 1.16, and skilled labor products' share of EU external imports quadrupled. Exporters of these products have outperformed other suppliers of human capital-intensive goods and technology products.

Another confirmation of the fast change in Hungary's specialization in EU markets is the loss of comparative advantage by producers of natural resource-intensive products, as well as a fast contraction in the share of unskilled labor-intensive products. The RCA index for natural resource-intensive products fell below unity beginning in 1992. The share of unskilled labor-intensive products in EU imports fell for the first time in 1997; before 1995, these exports had a higher share of EU imports than any other group. Until 1995 this share was also higher than the share of any other group in terms of factor intensity. Human capital-intensive products moved to first position in 1996, and also recorded a significant increase in 1997.

Changes in the Level of Processing

Hungary's export offerings have moved towards capital-and technology-intensive products, but have they become "higher value-added" in terms of processing of commodities? To address this question, we use a classification developed by the World Bank for analyzing different levels of processing commodities. The classification identifies 48 commodities exported in various stages of processing by developed and developing countries alike. The World Bank's commodity processing classification scheme distinguishes between at least two stages, a primary and processed stage product. The primary stage of vegetable chain consists of fresh vegetables; the processed stage includes preserved vegetables. An additional or third stage includes intermediate processing (the so-called semifabricated stage). For instance, the primary stage of the wheat chain consists of unmilled wheat (041), a semifabricated stage includes wheat mill or flour (046), and bread or biscuit (04841) constitutes the final stage.

The share of 48 commodity-processing chains in Hungarian exports to the EU rapidly declined from 35 percent in 1989 to 18 percent in 1996 (table 5). Their value, however, increased by almost 60 percent over this period. This was in large part because of a much faster growth in manufactures rather than a decline in exports of commodities. Although agriculture-based commodity chains continue to account for the largest share in these exports to the EU, they declined both in terms of value and share, with the exception of a wheat-based chain.
The share of primary stage and intermediate products in 48 commodity chains has been declining since 1989 while that of final stage products has significantly increased (table 5). This shift towards final stage products has been also reflected in shares in EU external imports. Taking the averages for the periods 1989−92 and 1994−97, final stage products comprised the only group that increased its presence in EU markets. In fact, the share of final stage products in EU imports increased spectacularly by more than 30 percent between 1989 and 1997.

Difficulties in accessing highly protected EU markets for agricultural products may account for Hungarian performance in commodity chains exports. Consider that the share of commodity chains in Hungarian exports, excluding those to the EU, increased from 21 to 28 percent between 1992 and 1997. Furthermore, the share of chains based on such commodity groups as meat and poultry, and fruit and vegetables—together accounting for around half of commodity chains exports—significantly increased.

The Hungarian export basket has certainly moved to "higher value−added" products in terms of processing. An increased portion is processed domestically. As costs are internationally competitive there is nothing wrong in exporting primary commodities; nonetheless, the growth of processing is a clear sign of a more sophisticated and mature industrial structure.

### Table 5 Changes in Hungary's Exports to the EU in Individual Commodity Chains, 1989–97

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<tbody>
<tr>
<td>Share of primary stage products</td>
<td>19.8</td>
<td>18.3</td>
<td>19.0</td>
<td>17.4</td>
<td>−7.8</td>
<td>−8.6</td>
</tr>
<tr>
<td>Share of intermediate products</td>
<td>37.3</td>
<td>26.0</td>
<td>33.0</td>
<td>27.4</td>
<td>−30.3</td>
<td>−17.1</td>
</tr>
<tr>
<td>Share of final stage products</td>
<td>42.9</td>
<td>55.7</td>
<td>48.0</td>
<td>55.3</td>
<td>+29.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Share of commodity chains in total exports to EU</td>
<td>35.2</td>
<td>15.1</td>
<td>31.4</td>
<td>17.6</td>
<td>−56.8</td>
<td>−43.9</td>
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**Memorandum:** share in EU imports

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<tbody>
<tr>
<td>Primary stage products</td>
<td>0.28</td>
<td>0.32</td>
<td>0.31</td>
<td>0.31</td>
<td>14.3</td>
<td>0.0</td>
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<tr>
<td>Intermediate stage products</td>
<td>2.35</td>
<td>2.27</td>
<td>2.62</td>
<td>2.41</td>
<td>−3.4</td>
<td>−8.0</td>
</tr>
<tr>
<td>Final stage products</td>
<td>1.62</td>
<td>2.16</td>
<td>2.03</td>
<td>2.18</td>
<td>33.3</td>
<td>7.4</td>
</tr>
</tbody>
</table>

**Source:** Derived from data in UN COMTRADE database.

"Environmentally Dirty" Products in Exports to the EU

Environmentally "dirty" industries tend to concentrate in countries where environmental control measures are not stringently applied. Less developed countries have less demanding compliance rules, and one would expect them
to have revealed comparative advantage in markets for dirty products. Indeed, some empirical studies confirm the 
shift in specialization in these products away from highly developed to developing countries. There is nothing 
inherently wrong with this, as less developed countries may have higher pollution assimilation capacities and less 
concern in general about the environment.

The definition of environmentally dirty industries comes from a study by Low and Yeats. They defined dirty 
industries as those incurring the highest level of pollution abatement and control expenditures in the United 
States, equal or higher than one percent of their sales in 1988. The weighted average of the expenditure to output 
ratio for the US industry as a whole was 0.54 percent, with cement having the highest ratio—over 3 percent. Using 
this classification, 188 four-digit SITC industries were selected.

Contrary to expectations, the share of environmentally dirty products in Hungary's EU exports has not increased 
following the collapse of central planning, as has been the case of Polish and Slovene exports to the EU. To the 
contrary, the share began declining rather precipitously beginning in 1991: it dropped from 25 percent in 1990 to 
21 percent in 1991, and by 1997 it was around 12 percent (table 6). These are strong indications that Hungary's 
specialization in EU markets in exports of environmentally dirty products has decreased.

Table 5 Changes in Hungary's Exports to the EU in Individual Commodity Chains, 1989–97

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<th>1997</th>
<th>Average 1989−92</th>
<th>Average, 1994−97</th>
<th>Change in percent, 1997 vs. 1989</th>
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<th>Average, 1994−97</th>
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<th>Change in percent, 1994−97 vs. 1989−92</th>
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<td>7.4</td>
</tr>
</tbody>
</table>

Source: Derived from data in UN COMTRADE database.

Overall, the environmentally dirty sectors had been until 1996 at a comparative advantage in the trade of these 
products: the value of RCA increased in 1990 and was still above unity in 1996. In 1997 Hungary "lost" its 
comparative advantage, as RCA fell to 0.96.

The mere existence of dirty industries does not automatically amount to a dirty environment. Intervening factors 
include environmental policy and the technologies used. While an assessment as to whether clean or dirty 
technologies have prevailed in Hungary is not possible, it appears that since 1990 significant improvements have
been made in environmental quality as well as a clear shift away from "dirty" industries. The fact that the share of dirty industries has declined suggests that Hungary may face lower costs of adjustment to EU environmental standards than countries where this share has not declined (for example, Poland and Slovenia).

The Role of Foreign Direct Investment in Restructuring and Export Performance

The Hungarian experience since 1990 provides strong evidence of the advantages of opening to foreign capital. Its successful reintegration into international markets, especially those of the EU countries, has been driven by investments of MNCs and, to a lesser extent, by outward processing. Opening to foreign capital appears to have been responsible for rapid modernization and readjustment of industrial capacities. This was demonstrated by dramatic shifts in Hungary's composition of exports, its capacity to weather the foreign exchange crisis in 1993–94, and its accelerating process of establishing market–supporting institutions.

Although a relatively small economy among the former CPEs, Hungary was, until 1994, the largest recipient of FDI among the former CPEs. Surpassed by Poland in 1994, Hungary regained its top position in 1995, thanks to privatization deals, and was the third largest recipient (after Poland and Russia) between 1996 and 1997. In the 1990–96 period, Hungary and Poland received over 50 percent of cumulative inflows of FDI to the region, totaling almost $50 billion. (All dollar amounts are in U.S. dollars) In terms of annual flows relative to GDP and FDI per capita, Hungary has been the top recipient of FDI flows each year over the 1990–97 period (table 6).

Foreign firms have played a dominant role in industrial restructuring. Considering the long time that has elapsed since FDI began flowing into Hungary, it is no surprise that Hungary's export capabilities have been enhanced. Foreign firms are much more foreign–trade–oriented than domestic firms, thus making a relatively larger contribution to Hungary's reintegration into the world economy. Foreign firms especially facilitate Hungary's entry into the EU, as the bulk of their foreign trade operation has been with the EU. Firms with foreign capital generated 47 percent of total net sales and accounted for 29 percent of total employment in 1996, and their shares in exports and imports were 60 and 64 percent respectively. In 1997, these shares increased to 73 percent for exports and 72 percent for imports.17

An important feature of FDI in Hungary is its large scope in terms of sectors covered and the actual number of foreign owned firms. Manufacturing received the largest FDI inflows ($4.2 billion) over 1989–96—accounting for 40 percent of total to foreign investment in 1996—though its share declined between 1992 and 1996. This was primarily the result of opening other sectors of the economy to privatization, namely public utilities and energy (the 1995 “big” privatization). These sectors attracted $1.5 billion, only slightly less than FDI in manufacturing ($1.7 billion).

While the indirect effects related to restructuring and productivity spillovers are difficult to extrapolate, the contribution of foreign firms to integrating domestic production capacities into global networks of production and distribution can be easily observed.

First, taking into account that foreign–owned firms account for almost three–fourths of Hungarian foreign trade turnover, and that this share has been rapidly increasing, these firms can be held largely accountable for a spectacular improvement in Hungarian export performance in EU markets. Indeed, a number of product groups, present among top performers in 1996 but not in 1992 or 1989, can be easily traced to production activities of MNCs. These include mainly automotive parts (such as Volkswagen–Audi piston engines accounting for 9 percent of total EU–destined exports in 1996) and electronics (such as Philips' sound recorders or TV monitors).

Second, while Hungarian statistics do not provide data on intra–firm trade, such trade must be quite significant judging by the presence of large MNCs. There is abundant evidence suggesting a rapidly progressing
incorporation of manufacturing capacities located in

Table 7 Cumulative Foreign Direct Investment Inflows in Per Capita Terms and in Relation to GDP

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<tbody>
<tr>
<td><strong>Estonia</strong></td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>163</td>
<td>55</td>
<td>305</td>
<td>440</td>
<td>513</td>
<td>620</td>
<td>476</td>
</tr>
<tr>
<td><strong>Czech Republic</strong></td>
<td>12</td>
<td>61</td>
<td>153</td>
<td>216</td>
<td>111</td>
<td>301</td>
<td>549</td>
<td>683</td>
<td>809</td>
<td>586</td>
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<tr>
<td><strong>Hungary</strong></td>
<td>29</td>
<td>168</td>
<td>308</td>
<td>531</td>
<td>259</td>
<td>639</td>
<td>1,068</td>
<td>1,256</td>
<td>1,439</td>
<td>1,101</td>
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<tr>
<td><strong>Poland</strong></td>
<td>2</td>
<td>10</td>
<td>27</td>
<td>71</td>
<td>28</td>
<td>119</td>
<td>213</td>
<td>329</td>
<td>411</td>
<td>268</td>
</tr>
<tr>
<td><strong>Slovenia</strong></td>
<td>0</td>
<td>0</td>
<td>56</td>
<td>112</td>
<td>42</td>
<td>154</td>
<td>239</td>
<td>328</td>
<td>476</td>
<td>299</td>
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**Cumulative inflows in terms of share in GDP**

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<tbody>
<tr>
<td><strong>Estonia</strong></td>
<td>0.00</td>
<td>0.00</td>
<td>2.17</td>
<td>6.64</td>
<td>1.66</td>
<td>12.20</td>
<td>16.59</td>
<td>18.89</td>
<td>22.03</td>
<td>3.85</td>
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<tr>
<td><strong>Czech Republic</strong></td>
<td>0.38</td>
<td>2.48</td>
<td>5.86</td>
<td>7.97</td>
<td>1.99</td>
<td>10.41</td>
<td>16.15</td>
<td>19.10</td>
<td>21.81</td>
<td>3.46</td>
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<tr>
<td><strong>Hungary</strong></td>
<td>0.98</td>
<td>5.55</td>
<td>9.71</td>
<td>16.01</td>
<td>4.00</td>
<td>18.87</td>
<td>29.40</td>
<td>33.98</td>
<td>38.26</td>
<td>5.56</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>0.16</td>
<td>0.56</td>
<td>1.36</td>
<td>3.37</td>
<td>0.84</td>
<td>5.39</td>
<td>8.48</td>
<td>12.06</td>
<td>14.48</td>
<td>2.78</td>
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<tr>
<td><strong>Slovenia</strong></td>
<td>0.00</td>
<td>0.00</td>
<td>0.88</td>
<td>1.77</td>
<td>0.44</td>
<td>2.36</td>
<td>3.27</td>
<td>4.19</td>
<td>5.67</td>
<td>0.98</td>
</tr>
</tbody>
</table>

*Source: The World Bank (1998).*

Hungary into global production networks, usually of large MNCs. Consider, for instance, that among medium and large firms in Hungary there are no purely Hungarian–owned private companies. The list of top 100 Hungarian companies in 1997 abounds with easily recognizable subsidiaries of MNCs. Furthermore, estimates of intra–industry trade suggest that its level in 1994 was already higher than that of some EU members (Finland, Greece, and Portugal, for instance).

The experience with FDI in Hungary should dispel fears that a preferential trading arrangement with the highly developed EU might lead to a catastrophic relocation of domestic industries.

**Conclusion: A Demonstrated Capacity to Withstand Competition in a Single Market**

The Hungarian economy has become tightly integrated into EU markets; in terms of trade, it is even more integrated than that of some EU members. Contrary to some predictions voiced at the outset of the transition, reintegration into international markets has not relegated Hungary to the status of a supplier of low value–added raw materials. Instead, the transition period has witnessed Hungary's growing specialization in increasingly sophisticated engineering products.

Indeed, changes in the composition of Hungarian EU–oriented exports were much more extensive than in other economies in transition, indicating an advanced process of economic restructuring. It appears that marketing more of the same products has not driven export growth. Instead, export offer has become more diversified. The share
of high value-added products has been increasing, while that of unskilled labor-intensive products has been declining. Contrary to what one might expect, the share of environmentally dirty products has also been declining.

The findings of this section empirically support the conclusion that Hungary's economy is well prepared to cope with the competitive pressures of a Single Market. The process of industrial restructuring has produced internationally competitive industrial capacities, Hungarian firms have become integrated into EU-wide distribution and production networks of MNCs, and a shift towards technology- and capital-intensive products indicates the capacity to compete at the higher end of the value-added scale. Finally, by producing exports, growth, and more investment, FDI has eased the pain of transition and contributed to the achieved progress in reintegration into the European economy. The challenge facing Hungary is to maintain conditions friendly to foreign and domestic investment alike and to macroeconomic stability.

**Contestability of Domestic Markets**

The openness of the economy to foreign investment and import competition determines the contestability of domestic markets. Contestability of domestic markets entails not only issues of market access for products, as embodied in tariffs and narrowly conceived non-tariff barriers, but also the market access implications of domestic policies and regulations (for example, standards requirements, environmental standards, and phytosanitary measures) as well as treatment afforded to foreign investment. Higher levels of contestability usually generate higher rates of economic growth and better export performance.

While Hungary has been a leader among transition economies in opening its industry and services to foreign capital, it has nonetheless been reluctant to open its foreign trade regime. As a result, there is a remarkable discord between an unusually high degree of openness to international capital inflows on one hand, and apparent reluctance to adopt a similarly liberal approach to goods inflows on the other. Considering Hungary's relatively small size and that it has already achieved a high degree of openness with foreign trade accounting for more than 40 percent of GDP, an argument can be made that Hungary would benefit enormously from unilateral liberalization.

**Foreign Trade Policies: Gradual and Uneven Liberalization**

While Hungary has been a leader among transition economies in opening its industry and services, there has been a strong reluctance to open its foreign trade regime. In fact, the collapse of central planning and the imperatives of regional and global WTO-related agreements have driven liberalization of access to domestic markets. Regional trade agreements have led to a very substantial lowering of tariff rates and other barriers to trade. WTO-consistency considerations have compelled Hungary to eliminate some extra charges on imports or abandon linkages between tax breaks for investors and export growth. Apart from these two powerful forces for liberalization, there was very little domestically generated push for free trade, except in 1990 when the authorities accelerated the liberalization schedule adopted in 1989.

**The Collapse of Central Planning**

State monopoly over foreign trade, together with central allocation of convertible currencies and the requirement to surrender hard currency earnings, left little room for trade liberalization under central planning until the late 1980s. With the rapid dismantling of central planning during 1987 and 1988, the state monopoly over foreign trade was abolished. However, in contrast to Poland's stabilization cum transformation program, liberalization of Hungary's foreign trade and exchange rate regime was to be introduced gradually, in 20 to 25 percent increments over a four-year period with liberalization of capital goods imports in 1989. With the erosion of a political base for central controls, the process was eventually accelerated. In 1990, rationing of imports of intermediate goods was abandoned, as were quotas on a number of consumer goods, albeit very reluctantly and not completely.
Nonetheless, the change in market access, which can be attributed directly to the collapse of both central planning and the state monopoly over foreign trade, was enormous. Consider that in 1987 not a single sector was open to competition from imports (or for that matter any competition at all); by 1990, around 70 percent of domestic production faced external competition. Consequently, the shield protecting domestic producers from import competition was removed, and tariffs, rather than NTBs (with some exceptions), have become the major tool of foreign trade policy.

**Liberalization through Regional Trade Agreements**

Preferential trade agreements have provided another powerful force for liberalizing the foreign trade regime. The two most relevant agreements are the EA and CEFTA, which envisage free trade for industrial products in the early 2000's. Imports of manufactures from the EU account for almost 74 percent of Hungarian total manufacture imports. Together with imports from CEFTA and EFTA, well over 80 percent of 1996 imports will be tariff–free.

**The EA:**

Since the EU is Hungary's largest natural trading partner, by far the most significant agreement was the EA, signed in December of 1991. The interim trade agreement, which went into effect on March 1992, eliminated duties on about one–third of all industrial products imported from the EU—mainly imported goods used by domestic industry. Beginning in 1995 however, Hungary's tariff concessions on industrial products went into effect: tariff rates on EU industrial imports will be slashed by 20 percent annually until 2000, when with some minor exceptions, they will be zeroed on all industrial products.

**CEFTA:**

The tariff cuts introduced under CEFTA–sponsored bilateral agreements have gone further than those under the EA. In 1997, already more than 90 percent of Hungarian tariff lines of industrial products had been zeroed. (On industrial imports from Romania, which joined only on July 1,1997, this share is around 75 percent.) For the remaining 10 percent of industrial products including footwear, steel, paper, some rubber products, and vehicles, tariffs will be abolished on January 1, 2001. Yet, CEFTA members already have preferential access, as rates are well below MFN tariff rates. They are now at 45 percent of MFN rates in trade with the Czech Republic, Poland, Slovakia, and Slovenia, and at 50 percent with Romania. These tariff rates will decline further in 1999, and most of them will be zeroed by 2000.

Preferences are not limited to industrial products; they also entail agricultural trade governed by a set of multilateral preferences and supported by bilaterally agreed tariff cuts. In all, agricultural preferences affect around 80 percent of Hungarian agricultural trade with CEFTA countries. The value of Hungarian exports was $482 million and that of imports was $97 million in 1997.

**Slippage in Trade Liberalization: The 1995 Stabilization Package**

The 1995 stabilization package marked a sharp departure from the path of gradual liberalization of access to domestic markets that had so far characterized Hungary's transition. It included an extra 8 percent temporary surcharge on imports, except energy and machinery. In addition to the import surcharge, ad valorem customs and administrative fees— incompatible with WTO/GATT rules—as well as a value–added tax of 25 percent were levied on all imports; the "effective" rate of surcharge was thus significantly larger. The "effective" rate of surcharge reached its peak level of 15 percent (on duty free imports) in 1995 and subsequently had been on the decrease. By June 1997 it was abolished.
An intriguing question is why this reversal in trade liberalization did not trigger the deterioration in exports. The answer to this paradox is that Hungary has, in fact, attracted FDI by keeping foreign investors out of its foreign trade policies. FDI has been protected from vagaries in Hungary's foreign trade policies through various means. A duty−drawback mechanism has allowed exporters to avoid tariff rates on imports of inputs for exports; other provisions maintained duty exemptions on imports of capital equipment. If an investor wanted to avoid burdensome customs procedures, FTZs (Free Trade Zones) de jure located outside the Hungarian customs territory. Many investors took advantage of these protected zones. Not surprisingly, their spectacular expansion coincided with the 1995 reversal in trade liberalization. The share of total exports from firms in FTZs increased from 11 percent in 1995 to 19 percent in 1996 and 26 percent in 1997. Together with outward processing, the share of exports generated from sources shielded against the vicissitudes of Hungarian foreign trade policy amounted to 47 percent of total exports. If anything, this proves that liberalism regarding foreign firms has been responsible for the export expansion.

On the other hand, it seems that the foreign trade measures in the 1995 stabilization package had, if anything, a negative impact on the export response of SMEs (Small and Medium Enterprises). Import users among SMEs had incurred losses because of a higher cost of imports. Although the drawback mechanism would allow them to recoup extra taxes on imports, this mechanism is costly to use and creates a considerable administrative burden in terms of processing information for customs. The transaction costs may be too high to warrant an extra effort involved in getting a refund on "exported" portion of imports. As such, these arrangements are usually not attractive to small firms.

**Nontariff Measures**

The pervasiveness of nontariff measures negatively affect foreign trade. The percentage of imports into Hungary subject to NTBs (that is, the import−weighted frequency ratio), amounted to 19.5 percent in 1994. By the standards of highly developed countries, the NTB coverage ratio was not high (for the EU it amounted to 16.5 percent in the same year, before tarification (tariff equivalent of non−tariff measures) of agricultural products under GATT/WTO aegis). While NTBs are more prevalent in Hungary than in the EU, types of NTBs used are much less diversified. Hungary relies mainly on quantitative restrictions in form of discretionary (nonautomatic) licensing and quotas, both types accounting for approximately 60 percent of NTB−affected imports.

There are many NTB−ridden products, such as: agricultural goods, sensitive manufactures (textiles and garments), some chemicals, steel, and cars. Hungary resorts to two types of quantitative restrictions: one is a uniquely Hungarian global quota on consumer goods; another entails import licensing.

**Global Quota on Consumer Goods:**

The list of products subject to global quota remains quite extensive, although beginning in 1998 its coverage slightly declined. In 1991, the quota was set at $630 million and was subsequently raised to $750 million. With the removal of all agricultural products from the quota as a result of tarification required by the Uruguay Round Agreements, its value fell to $518 million in 1995.

The global quota strikes one as an anachronism—a vestige of central planning. Its existence dates back to Hungary's accession to the GATT in 1973. Under central planning this tool had little if any relevance, but its significance changed drastically with the full abolition of state monopoly over foreign trade. As a Hungarian economist notes "... the global quota is the last remaining openly discretionary and outright protectionist element in Hungarian foreign trade régime."
Moreover, it seems to be a redundant instrument with little purpose. In some cases, one may explain QRs (Quantitative Restrictions), in terms of political economy. Such is the case of cars, where the desire to attract foreign direct investment during the early stages of the transition had often overridden purely economic considerations. But maintaining quotas on jewelry or canned fish cannot be so easily explained. A quick removal of the global quota would go a long way towards abolishing the remnants of micromanagement of foreign trade.

Import Licensing:

A second tool of managed trade is licenses, which cover both exports and imports. The reasons for licenses are not always clear. Apart from arms or substances threatening public safety, the list contains harmless agricultural products, some metal ores, and gold and silver. Among agricultural products, goose and duck livers are subject to internal quotas imposed externally by the EU. But this does not appear to be the case of other products such as durum wheat, barley (removed on July 1, 1998) or sugar beet (removed on July 1, 1998). Overall, about 6 percent of exports were subject to nonautomatic license requirements in 1998.

The list of products subject to nonautomatic licensing is much more extensive for imports than exports, although it directly affects a smaller percentage of imports. The list contains fish and fish products, some chemicals, textiles and clothing (the longest list in terms of tariff items), some wood products, footwear, precious metals, vehicles, and arms. Protection of domestic producers or national security considerations (such as control of arms trade) do not appear to be the only reason for maintaining licensing. For instance, caviar is not domestically produced. In addition, there is a common list of items subject to licensing as both exports and imports. This list includes energy resources (coal, oil and natural gas) precious metal ores, and their products, and products described as hazardous to the environment or public health.

Finally, there is a list of products subject to nonautomatic licensing, both for exports and imports. It contains the following groups of products: energy (coal and coal sorts; crude oil and natural gas); precious metals and articles (silver, gold, and jewelry); and materials hazardous to health and the environment.

While licensing some products seems justified, controlling others does not. The presence of licensing indicates a bureaucratic temptation to micromanage. The danger inherent in this type of arrangement is that it provides opportunities for rent-seeking activities that may unnecessarily complicate the political atmosphere.

Reverse Discrimination: Transfer of Wealth to Preferred Suppliers

Preferential trade arrangements always spur discrimination against suppliers from third countries. MFN tariff rates and other border charges levied on imports from nonpreferential trading partners determine the level of reverse discrimination. The potential for trade diversion from nonpreferential to preferential trading partners increases with the magnitude of difference between MFN and preferential tariff rates.

Since reductions in MFN tariff rates under the Uruguay Round (UR) agreement proceed at a slower pace than reductions under preferential agreements, the level of reverse discrimination remains significant. A measure of this discrimination is the difference between a simple average MFN rate (8.2 percent for industrial products) and a preferential rate. In 1997, for imports from the EU and EFTA countries, this difference was 6.2 percent. For founding members of CEFTA, the margin of preference was even higher, amounting to 7.3 percent. As a result, the average supplier from a third country is unable to market a product unless its cost is at least 6 percent lower than that of an EU supplier.

Import Licensing:
The margins will remain substantial even when tariff concessions negotiated under UR agreements are phased in. When it joined the WTO in 1995, Hungary chose to bind its MFN tariff rates at levels significantly higher than the EU. Both average post–UR bound rates and weighted rates on industrial products are twice as high as in the EU (appendix table 3). The largest absolute difference in MFN weighted rates is for transport equipment (10.6) and nonelectric machinery (6.1). Leaving aside agricultural products, whose tariff levels are difficult to estimate, the absolute differences in bound rates between the EU and Hungary are slightly smaller.

The increase in the level of reverse discrimination following the implementation of trade components of agreements with the EU (March 1992) and the establishment of CEFTA in 1993 has not led to a substantial increase of preferential partners in Hungarian imports. Their share in total imports was relatively stable, averaging 70 percent between 1992 and 1997. It increased from 66 percent in 1991 to 69 percent in 1992. The share in Hungarian imports of manufactures was higher, and rose from 80 percent in 1991 to 82 percent in 1992. Its average was around 82 percent over 1992–97, displaying dispersion of 3 percentage points. Therefore, it would seem that there was no trade diversion usually accompanying reverse discrimination.

Yet, the tariff–related reverse discrimination should be reduced. Large margins usually contribute to higher import prices. This is especially true in markets for sophisticated manufactures often dominated by two or three suppliers. If all of these suppliers were in preferential countries, competition among them would be sufficient to keep down the price. More often than not however, there are also firms from third countries. If only one of them is in the EU, the price paid by a Hungarian importer is likely to be higher by up to the difference between an MFN rate and a preferential rate. In other words, an EU supplier obtains the rent at the expense of Hungarian users of imports. Since Hungarian MFN rates are higher than in the EU, their reduction to EU levels would slash the rent to that implied by the level of protection in the EU.

Moreover, Hungarian producers are already exposed to fierce competition from preferential partners. The EU/EFTA is an economic powerhouse highly competitive in world markets; the alignment of MFN tariff rates with those in the EU would not increase competition, which Hungarian producers face in most of their domestic markets. Under these circumstances, higher MFN rates than in the EU amount to voluntary transfers of wealth from Hungary to EU/EFTA economies.

**Conclusion: Implications for Preaccession Strategy**

Considering Hungary’s spectacular export success in highly competitive EU markets, it would seem that staying the course would be the best possible policy option for a preaccession strategy. Economic reforms have established a business friendly environment. Services, mostly open to foreign capital, provide good support for foreign trade activity. The banking sector seems to be remarkably strong. Although inflation remains at double digits, the policies in place promise its continued decline. Finally, tariffs on imports of industrial products from preferential and MFN partners have been either eliminated or reduced.

The competitiveness of Hungarian firms, both domestic and foreign–owned, ultimately depends on competition at home from both imports and domestic sources. This, in turn, hinges critically on a liberal trade and investment regime. Although Hungary has a liberal investment regime, conditions for market access are unnecessarily difficult for MFN suppliers. The task of a good preaccession strategy should be to remove the glaring dissonance between the two regimes by liberalizing the MFN foreign trade regime for industrial products. This should entail significantly reducing the scope of nontariff measures and adopting EU MFN tariff rates on industrial products.
Nontariff Measures

By the standards of Central European transition economies, the NTB coverage of imports in Hungary is exceptionally high. The global quota on consumer products—a vestige of central planning—is an invitation to administrative micromanagement of foreign trade. Its maintenance contributes to higher prices for import users by reducing competition; it also invites lobbying efforts for protection. Therefore, it should be abolished.

Furthermore, the Government should review products subject to automatic licensing in exports and imports. Items that are not environmental hazards, related to national security, or a danger to preservation of cultural values should be removed from the list.

Tariff Measures.

Tariff rates on industrial products are substantially higher in Hungary than in the EU. In order to ease adjustment to future membership and improve economic growth during the preaccession stage, Hungary should consider adopting the EU, preferably post–UR, MFN tariff schedule on industrial products. The rule of thumb for reducing MFN applied tariff rates on industrial products might be as follows: if the Hungarian tariff rate is larger than the EU MFN applied rate, adopt the EU rate. As a result, the average (simple) MFN tariff rate on industrial products would fall from about 8 percent to about 4 percent.

The recommended measure has several advantages. It would level the playing field for MFN suppliers with conditions in EU markets. It is simple and easy to implement. There would be little, if any, domestic opposition from competing import sectors, as these already face formidable competitors from the EU. Last, it would not require a formal notification of the WTO of a change in statutory rates. Hungary could simply lower applied rates to those in the EU without changing statutory and binding rates.

Discrimination Against Imports from non–WTO Countries

While an ad valorem custom fee was abolished on January 1, 1997, it still applies to imports from non–WTO members. Not a single former Soviet Republic is a member of the WTO. Because of a "transformation crisis" in many of them, the mutual trade has fallen steeply. Yet, suppressing it even further by levying extra charges on these imports does not seem to be a good policy. It exacerbates the geographical concentration of Hungary's foreign trade. It also unnecessarily erodes commercial links that may turn out to be important once these economies rebound.

Statistical Annex

Appendix Table 1 Share of Hungarian Products in EU External Imports by Major Product Categories, 1989–96

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<tbody>
<tr>
<td>All food products (0+1+22+4)</td>
<td>2.00</td>
<td>1.99</td>
<td>2.35</td>
<td>2.16</td>
<td>1.82</td>
<td>1.78</td>
<td>1.74</td>
<td>1.77</td>
<td>1.63</td>
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<tr>
<td>Agricultural materials (2–22–27–28)</td>
<td>0.88</td>
<td>1.00</td>
<td>1.34</td>
<td>1.31</td>
<td>1.14</td>
<td>1.02</td>
<td>0.92</td>
<td>1.02</td>
<td>1.24</td>
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<tr>
<td>Textile fibres (26)</td>
<td>0.38</td>
<td>0.51</td>
<td>0.66</td>
<td>0.52</td>
<td>0.30</td>
<td>0.39</td>
<td>0.34</td>
<td>0.39</td>
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<td></td>
<td>0.77</td>
<td>1.01</td>
<td>0.87</td>
<td>1.04</td>
<td>0.94</td>
<td>1.26</td>
<td>1.46</td>
<td>1.19</td>
<td>1.23</td>
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### Appendix Table 2 Revealed Comparative Advantage and Shares in EU Imports of Major Product Groups in Terms of their Factor Intensities, 1985–95

<table>
<thead>
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<td>Revealed Comparative Advantage Indices</td>
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<tr>
<td>Natural–resource intensive</td>
<td>1.15</td>
<td>1.05</td>
<td>1.08</td>
<td>1.97</td>
<td>0.90</td>
<td>0.85</td>
<td>0.76</td>
<td>0.66</td>
<td>0.50</td>
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<tr>
<td>Unskilled–labor intensive</td>
<td>1.61</td>
<td>1.71</td>
<td>1.67</td>
<td>1.73</td>
<td>1.77</td>
<td>1.61</td>
<td>1.41</td>
<td>1.50</td>
<td>1.08</td>
</tr>
<tr>
<td>Technology–intensive</td>
<td>0.61</td>
<td>0.67</td>
<td>0.68</td>
<td>0.70</td>
<td>0.75</td>
<td>0.82</td>
<td>0.95</td>
<td>1.00</td>
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<td>Human–capital intensive</td>
<td>0.92</td>
<td>1.01</td>
<td>0.93</td>
<td>1.06</td>
<td>1.03</td>
<td>1.20</td>
<td>1.34</td>
<td>1.46</td>
<td>1.52</td>
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<tr>
<td>Share in EU Imports, in percent</td>
<td></td>
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<td></td>
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<tr>
<td>Natural–resource intensive</td>
<td>0.90</td>
<td>0.91</td>
<td>1.08</td>
<td>1.06</td>
<td>0.93</td>
<td>1.01</td>
<td>1.04</td>
<td>1.00</td>
<td>0.90</td>
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<tr>
<td>Unskilled–labor intensive</td>
<td>1.26</td>
<td>1.47</td>
<td>1.67</td>
<td>1.89</td>
<td>1.82</td>
<td>1.89</td>
<td>1.95</td>
<td>2.12</td>
<td>1.93</td>
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<tr>
<td>Technology–intensive</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Human–capital intensive</td>
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</tr>
</tbody>
</table>

**Source:** Derived from data in the UN COMTRADE database.
Unskilled–labor intensive
Ethnology intensive 0.48 0.58 0.68 0.76 0.77 1.31 1.51 2.07 433
Humancapital intensive 0.72 0.87 0.93 1.16 1.07 1.42 1.85 2.21 2.73 378

Source: Derived from the UN COMTRADE database as reported by the EU imports.

**Appendix Table 3 Bindings and Levels of Most–Favored Nation Tariff Rates after the Uruguay Round**

<table>
<thead>
<tr>
<th>Percentage of imports GATT bound</th>
<th>Percentage of imports GATT bound below applied rates</th>
<th>Applied rate weight by 1989 imports</th>
<th>Post–Uruguay bound rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products, excluding fish (est. 2)</td>
<td>EU −100.0 HUN −100.0</td>
<td>EU − 41.4 HUN − 27.0</td>
<td>EU − 3.7 HUN − 16.5</td>
</tr>
<tr>
<td>Industrial products</td>
<td>EU −100.0 HUN − 93.6</td>
<td>EU − 43.3 HUN − 55.6</td>
<td>EU − 2.9 HUN − 6.7</td>
</tr>
<tr>
<td>wood, pulp, paper, and furniture</td>
<td>EU −100.0 HUN − 100.0</td>
<td>EU − 16.7 HUN − 34.5</td>
<td>EU − 0.3 HUN − 3.3</td>
</tr>
<tr>
<td>textiles and clothing</td>
<td>EU − 100.0 HUN − 98.5</td>
<td>EU − 70.5 HUN − 80.6</td>
<td>EU − 8.7 HUN − 8.5</td>
</tr>
<tr>
<td>leather, rubber, footwear</td>
<td>EU −100.0 HUN − 100.0</td>
<td>EU − 59.7 HUN − 72.7</td>
<td>EU − 4.9 HUN − 6.5</td>
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<tr>
<td>metals</td>
<td>EU −100.0 HUN − 100.0</td>
<td>EU − 21.6 HUN − 61.7</td>
<td>EU − 1.0 HUN − 3.9</td>
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<tr>
<td>chemical and photographic supplies</td>
<td>EU −100.0 HUN − 97.3</td>
<td>EU − 44.5 HUN − 56.1</td>
<td>EU − 3.8 HUN − 4.2</td>
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<tr>
<td>transport equipment</td>
<td>EU −100.0 HUN − 54.0</td>
<td>EU − 22.2 HUN − 14.3</td>
<td>EU − 5.5 HUN − 16.1</td>
</tr>
<tr>
<td>non–electric machinery</td>
<td>EU −100.0 HUN − 98.3</td>
<td>EU − 66.3 HUN − 83.2</td>
<td>EU − 1.4 HUN − 7.5</td>
</tr>
<tr>
<td>electric machinery</td>
<td>EU −100.0 HUN − 92.9</td>
<td>EU − 65.9 HUN − 60.1</td>
<td>EU − 5.4 HUN − 8.8</td>
</tr>
<tr>
<td>mineral products, precious stones, and metal</td>
<td>EU −100.0 HUN − 96.9</td>
<td>EU − 20.0 HUN − 18.6</td>
<td>EU − 0.5 HUN − 2.5</td>
</tr>
<tr>
<td>manufactures nes</td>
<td>EU −100.0 HUN − 98.2</td>
<td>EU − 54.1 HUN − 53.7</td>
<td>EU − 2.5 HUN − 4.6</td>
</tr>
<tr>
<td>All merchandise trade</td>
<td>EU −100.0 HUN − 94.4</td>
<td>EU − 38.6 HUN − 49.9</td>
<td>EU − 2.9 HUN − 6.8</td>
</tr>
</tbody>
</table>

Source: Derived from Finger and others 1996.
Notes

1. Pan-European markets include those in the EU, EFTA, NAFTA, Bulgaria and Baltic States.

2. The CMEA internal settlement mechanism based on "transferable ruble" was formally abandoned on January 1, 1991. Six months later the organization itself was dissolved.

3. Total exports as reported in the Hungarian official statistics. Exports to the EU derived from the EU import statistics. In order to account for differences due to CIF/FOB conventions, the value of imports from the EU, as reported by Hungary, was corrected by annual growth rates of EU imports from Hungary as reported by the EU. This may overstate the share of EU–oriented exports, as some exports (for example, those due to outward processing) were not accounted for in Hungarian statistics thus understating the value of total exports.

4. Own calculations from data in UN COMTRADE database.

5. The share of industrial products in total industrial imports from the EU for which Hungary eliminated duties in 1992 was around 30 percent. These were mainly products not produced domestically. By 1999, tariff rates on EU industrial imports will be zeroed on all industrial products, with some minor exceptions.

6. This analysis is based on mirror statistics, i.e., data on Hungarian exports and imports as reported by its EU trading partners to the UN COMTRADE database.

7. Calculations are based on data reported by Hungary to the UN COMTRADE database.

8. The share changed over time. It increased to 2.1 percent in 1991, fell to 1.51 in 1995, and increased to 1.56 in 1997. Had Hungary maintained its 1989 share, its agricultural exports would have been larger by $70 million.

9. These included sausages (0134), pig meat (0113), swine (0013), sheep, lambs and goats (0012), unmilled rye (0451), and fat of pig and poultry (0913).


11. The first group consists of food, beverages, crude materials, mineral fuels, animal and vegetable oils, leather, plywood, mineral manufactures, diamonds and non–ferrous metals. The second group, representing commodities with the lowest value added per worker, includes textiles, garments, furniture, glass, etc. The third group of technology–intensive products are goods with the highest ratios of R&D (Research and Development) expenditures to value added, whereas the human–capital–intensive group contains goods with the lowest ratios of R&D expenditures to value added. The third group includes chemicals (plastics, fertilizers, and so forth), some capital equipment, telecommunications equipment, medical, scientific and measuring equipment, and
photographic supplies. The fourth group includes such goods as paints rubber, paper, TV and radio sets, and so forth.

12. Considering that there seems to be no consensus as to where the line distinguishing between a commodity and a manufactured product should be drawn, one would expect that classifications of products in terms of factor intensities would be imprecise. The variety of definitions used by international organizations testifies to the difficulties involved. For their overview, see World Bank (1992), appendix table B1.

13. A country's "revealed" comparative advantage in a product "j" is defined as the ratio of the share of "j" in the country's exports to the share of the product "j" in world trade. A value for this index below unity indicates a comparative disadvantage. If the index takes a value greater than unity, the country is considered to have a "revealed" comparative advantage in the product. In this particular case, Hungary has a revealed comparative advantage in a product if its export of that item as a share of its total exports exceeds the EU imports of the item as a share of EU total imports.

14. The value of exports of the meat and poultry chain—the single largest items accounting for 37 percent in 1989 and 25 percent in total exports of commodity chains in 1997—slightly increased in current prices from US$ 487 million in 1989 to $513 million in 1997. But in terms of averages for 1989−92 and 1994−97 there was a slight decline from $574 million to $513 million. Other chains that have registered a contraction in terms of value were vegetables, sulfur, copper and petroleum.

15. This is according to trade data as reported by Hungary to the UN system. For years prior to 1992, Hungary did not report data in 4−digit SITC breakdown. Therefore, it is not possible to assess developments for the whole 1989−96 period.


17. All data are taken from Hamar (1998).

18. See the top 100 list in Dun & Bradstreet Hungaria Inc. (1998). Among the 20 largest firms in terms of sales, there are at least six companies, which are part of large MNCs. These include IBM Storage Products (#2); Volkswagen's Audi Hungaria Motor (#6); General Motor's Opel Hungary (#7); Philips (#12); General Electric Lightning (#15); and Japan's Magyar Suzuki (#16). Many companies are majority owned by MNCs (e.g., the white−goods producer Lehel Hutogepgyar (#39), which is owned by Sweden's Electrolux.

19. The Central European Free Trade Agreement (CEFTA), signed in 1992, provides a framework for bilateral agreements among six states: the Czech Republic, Hungary, Poland, Slovakia, Slovenia (which acceded in 1996) and Romania (which acceded in July 1997).
20. More precisely, the CEFTA system has two components: a multilateral and bilateral. A multilateral component comprises commonly agreed preferences, whereas a bilateral one comprises those negotiated bilaterally and not extended to all CEFTA members.

21. There are some exemptions. For instance, at the request of Poland, duties on automobiles will be zeroed a year later on January 1, 2002.

22. The import surcharge was subsequently lowered to 7 percent (July 1996), 6 percent (October 1996), 4 percent (March 1997), and 3 percent (1997). It was eliminated on July 1, 1997.

23. Until January 1996 Hungary charged a 5 percent customs fee (3 percent statistical fee and 2 percent clearance fee) which was then reduced to 2 percent. On January 1, 1997, these fees were abolished on imports from WTO–member countries. Thus, the "effective" rate of surcharge on dutyfree imports was 15 percent in 1995; 10.75 (until October) and 9.5 percent (November–December, 1996); and 7.5 percent (until March), 5 percent (March–April), and 3.75 percent (May through June, 1997).


26. The share of exports based on outward processing was 21 percent (Ministry of Industry Trade and Tourism (1988).

27. See Csaba(1996), 16.

28. The Ministry of Agriculture decides on a list of products to be licensed for exports. Although wheat was taken off the list in 1997, exporters have to make a deposit of FT 500 per ton.


31. Given significant changes in composition of imports since 1989, the use of 1989 imports to derive weights for tariff rates raises objections. Rates weighted by more recent imports would probably be different. But there is no reason to assume that changes in the composition of EU imports over time were significantly different from those in Hungarian imports.
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