

STUDIES L

ADJUSTING
TO TRADE
LIBERALIZATION

THE ROLE OF POLICY, INSTITUTIONS AND WTO DISCIPLINES

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# **Table of Contents**

I.	Intro	Introduction and Executive Summary					
II.	Trade and the pace and pattern of economic change						
III.	On t	he bene	fits and costs of trade liberalization	15			
	A.	Temp	orary adjustment costs and long-term benefits	15			
	В.		nce on adjustment costs: the net gains from trade liberalization when adjustment costs are taken ccount	16			
	C.	Evider	nce on adjustment costs: the effect of trade liberalization on (un)employment	17			
	D.	Result	ts and open questions: why are adjustment costs a matter of concern for policy makers?	18			
IV.	Why	it is imp	portant to distinguish between adjustment effects and other income effects of trade reform	21			
	Α.	Work	ers and adjustment	22			
		1.	How are workers affected by adjustment costs	22			
		2.	Empirical evidence on the losses suffered by displaced workers	23			
	В.	Firms and adjustment					
	C.	Adjustment costs and resistance against trade liberalization					
V.	Governments can facilitate the adjustment process.						
	Α.	Dome	estic institutions and policies	33			
		1.	Credit markets and social safety nets	33			
		2.	Labor markets	34			
		3.	Education and training	36			
		4.	Infrastructure and utilities	36			
		5.	Information and expectations	37			
		6.	Domestic macroeconomic policy	37			
	В.	Trade	policy	37			
		1.	Political and economic arguments in favor of gradual trade liberalization	37			
		2.	Why implementation periods may help firms to adjust but cannot replace social safety nets	39			
		3.	Why the credibility of trade policy matters for adjustment	39			
		4.	Export promotion and the expansion of exporting sectors	40			
VI.	WTC	) provisi	ons give governments flexibility in managing trade-related adjustment	43			
	Α.	Transi	ition periods, implementation periods, deadlines	44			
		1.	Transition periods available to all Members	44			
		2.	Additional flexibility for developing and least-developed countries	45			

	B.	Safegu	uard measures	48		
		1.	Article XIX and the Agreement on Safeguards	48		
		2.	Other specific safeguards.	52		
		3.	Differences between safeguards and other contingent protection instruments	55		
		4.	Balance-of-payment provisions	56		
	C.	WTO p	provisions on subsidies	58		
VII.	Bibliography					
VIII.	Techr	nical An	nex	65		
	A.	Structural change index				
	B.	3. The distributional effects of adjustment costs				
	C.	When	adjustment takes time	65		
IX.	Anne	x Sectio	on II	67		

# I. Introduction and Executive Summary

"Instead of defending an imperfect state of affairs, political leaders should be advocating change."

"...it takes courage to pursue policies that will bring change and upheaval. Economic restructuring does not just create

### Main Findings

This study examines in detail the process immediately following a change in trade policy and analyzes what this process entails for the economy as a whole and for individual workers and companies. The study aims to assist policy makers in pinpointing those aspects of an economy that hamper adjustment. It seeks to identify tools at the disposal of governments to smooth adjustment, to minimize an economy's adjustment costs and to alleviate the burden of those who suffer most. Some of the salient conclusions from the study are summarized below.

 Trade liberalization is an agent of economic change, but evidence shows that it does not lead to drastic changes in a country's overall production structure.

Aggregate statistics suggest that the major part of observed structural change reflects underlying trends in economic

opposition to trade reform. Gradual liberalization can also smooth the adjustment process when the effects of trade liberalization are highly concentrated in certain regions or have strong repercussions in the country as a whole. On the other hand, if reforms are carried out too slowly or are not sufficiently well defined in advance, gradualism could undermine the integrity of intended reforms.

 In many cases effective adjustment to trade liberalization will require the expansion of a country's export sector and this may be an argument for pro-export policies.

If effective adjustment is aided by growth in export markets and export expansion occurs too slowly or fails to materialize, the process of change may be seriously hampered. The study argues that exporters in developing countries may face particular problems. To the extent that these problems hinder the adjustment process, the use of export promotion schemes can be defended on economic efficiency grounds.

 WTO agreements seek to provide space for governments to tackle adjustment problems.

In practice, multilateral trade liberalization is by its very nature a gradual process that takes into account difficulties related to adjustment. Multilaterally agreed trade rules and disciplines also offer countries several safety valves that can be used to address adjustment problems.

Most WTO Agreements contain more or less explicit provisions aimed at facilitating their adoption. In particular, they often specify phased-in implementation periods. Implementation periods tend to differ among agreements and groups of countries, with developing and least-developed countries usually being granted longer implementation periods.

"Safeguard" provisions in WTO agreements offer Members the possibility to react *ex post* to problems caused by unforeseen import surges. This study argues that the drafters of WTO agreements tended to focus on restructuring industries hurt by import competition, rather than on the reallocation of resources

released by the contraction of import competing sectors. The study also argues there has been a tendency for firms to resort to anti-dumping remedies rather than safeguard remedies when seeking temporary relief for adjustment purposes.

### Organization of the Study

Section II of the study presents empirical evidence on the pace and pattern of economic change in past decades. It also discusses evidence on the impact of trade liberalization. Section III briefly considers what economic theory has to say about the likely relationship between the long-term gains from trade and adjustment costs. It then presents a survey of empirical estimates of adjustment costs and examines evidence concerning the effects of trade liberalization on the level of unemployment, one of the indicators for adjustment problems. Section IV analyzes the adjustment process at a more detailed level by looking at how trade liberalization affects individual workers and companies. This section emphasizes the difference between adjustment effects and other income effects of trade reform. It also discusses how adjustment problems may lead to resistance against trade liberalization

Section V considers those characteristics of an economy that actually affect the size of the adjustment costs individuals and the economy face after trade liberalization. This section identifies potential instruments at the disposal of governments to facilitate adjustment. It also addresses the question of how the design of trade policy affects adjustment costs. Throughout Section V particular attention is paid to the functioning of markets and institutions affecting adjustment in developing countries. For instance, it addresses the question whether adjustment costs may be relatively high in developing countries because of the quality and availability of infrastructure and public services. Taking into account that developing countries have often embarked on trade reform in the wake of economic crises, Section V also examines the interaction between domestic macroeconomic policy and trade policy. Finally, Section VI discusses WTO provisions in terms of their effect the ability of governments to intervene in the adjustment process.

II. Trade and the pace and pattern of economic change				

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imports showed a decline from 53 to 43 per cent. Changes in Japan's trade pattern thus show certain similarities with changes in the composition of production across branches within manufacturing.

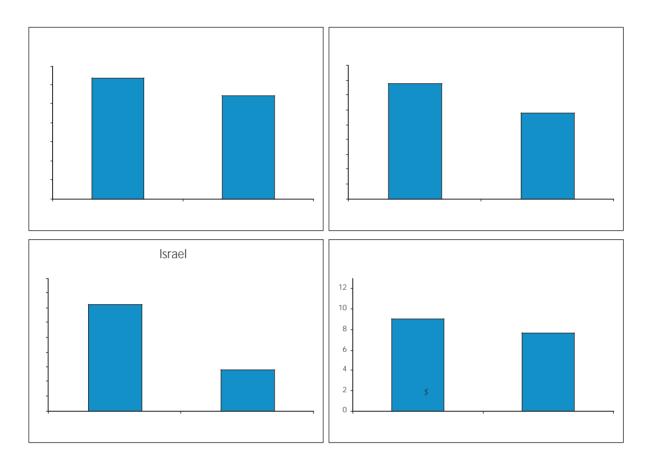
The same cannot be said for the US, where the share of textiles and clothing in total manufacturing exports decreased from 4 to 3 per cent, while the share of machinery and transport equipment rose from 58 to 63 per cent. In general the composition of manufacturing exports remained fairly stable in the US over this period. Major shifts took place, however, in US manufacturing imports, with the share in imports of machinery

and transport increasing from 27 to 59 per cent and those of textile and clothing and of semi-manufactured goods (includes leather and wood) decreasing from 15 to 9 per cent and 27 to 9 per cent, respectively.

Of the two countries, only in Japan do changes in the composition of manufacturing output show some parallels with changes in the country's trade flows. But Graph II.2 shows that in both countries the weight of each manufacturing branch in the country's total GDP has declined. In other words, the increased importance of certain branches within manufacturing merely reflects the fact that they declined less (in absolute terms) than

other branches. In other words, the expanding service sector attracted production factors from all branches in the manufacturing sector.

Trade may have played a role by slowing down the relative decline of the export-oriented industries while accelerating the decline of import-competing industries. Granted these conclusions are based on just two examples, but they are consistent with conclusions from the debate about the causes of increased inequalities between skilled and unskilled workers in industrialized countries<sup>10</sup>, namely that the impact of trade is significantly smaller than the impact of technological change.



Note: Average SCIs for indicated periods and for manufacturing value added disaggregated into nine industry branches (see Graph II.2)

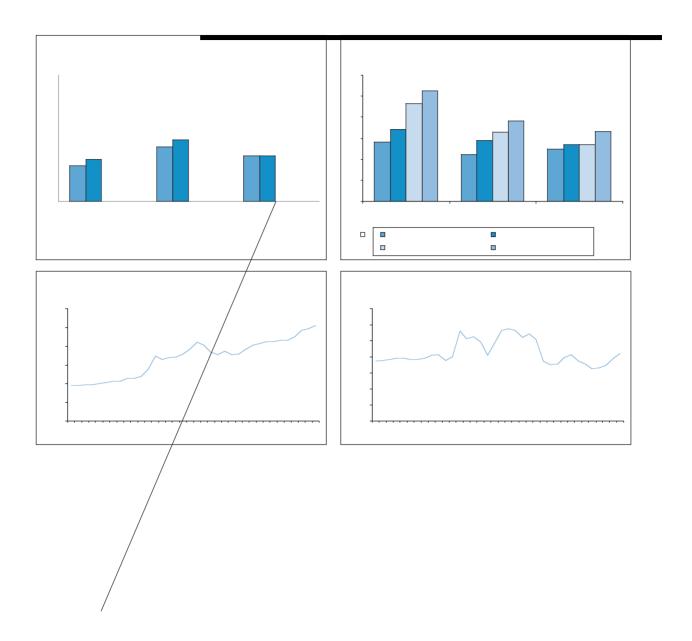
Sources: Industrial Statistics Database 3-Digit ISIC 2000 (UNIDO) Sachs & Warner: Tr.556 0 #D(t)Tj@s333 0 TD(o)Tj24

first column on the left shows the importance for each country of changes in relative shares among the three main sectors (agriculture, industry and services). The second column indicates the extent (if any) of the increase in structural change we obtain by allowing for the changes taking place within "industry", when "industry" is divided into construction, mining, utilities (electricity, gas and water) and manufacturing. The third column allows for additional structural change within the manufacturing sector and the fourth column allows for additional structural change within the service sector.

We see that over the whole observation period, by far the largest structural changes in the US economy are due to changes in the relative weights of agriculture, industry and services. Shifts between construction, mining, utilities and manufacturing added some variation to the economy in the first two periods, but the

additional effect of allowing for shifts within manufacturing was insignificant over the whole observation period. In Japan, changes in the relative sizes of different industries within manufacturing did play an important role in the economy's overall level of structural change in the first two sub-periods. Last but not least, Graph II.4 shows the importance of structural changes within the service sector in determining the overall level of structural change for both economies, in particular in the periods of 1974-1985 and 1986-1997. It should however be pointed out that the level of aggregation in the data we used may not appropriately reflect all the changes going on in the economy. Recent studies have shown that the bulk of resource reallocations across firms remains internal to a specific industry. <sup>15</sup> More detailed data analysis would be necessary in order to capture the impact of such intra-industry adjustment on the overall level of an economy's structural change.

<sup>15</sup> See Melitz (2002).



III. On the benefits and costs of trade liberalization

Trade liberalization, however, will lead at the same time to two basic types of gains for the economy. Consumers gain from the lower prices (and increased quality and variety) that come with trade liberalization. In addition, the adjustment process described above will bring efficiency gains, as increased international specialization allows factors of production to shift into activities in which the country is relatively more productive (that is, in line with its comparative advantage). Trade liberalization brings even more gains when companies can exploit economies of scale and when trade boosts the country's growth rate (for example, by increasing the inflow of new technologies).

Although the economy may be worse off in the short run, the gains from trade will outweigh short-run adjustment costs in the medium to long term

Even though trade liberalization brings net gains to the economy, this does not imply that the economy is immediately better off. It may well be that for a period of time following the liberalization, the economy is worse off than without liberalization. In this case the adjustment costs are an investment the country makes in order to reap future "profits" in the form of higher incomes.

It cannot be excluded that after trade liberalization aggregate consumption follows a pattern similar to the one depicted in Graph III.1.<sup>17</sup> We see that, compared to the situation without trade (the straight line), aggregate consumption at first decreases. Only after a period of time is the original level of consumption reached, after which consumption increases further until it reaches a more or less stable but higher level. Indeed, the evidence to

trade liberalization are significantly higher for products protected by quotas, with the result that during the adjustment period, adjustment costs represent only 4 per cent of gains from freer trade. In the long-run the weight of adjustment costs virtually disappears for those items. Overall Magee finds that with the elimination of all trade barriers, adjustment costs represent 12 per cent of gains from trade in the first five years and less than 2 per cent in the long-run.

Baldwin, Mutti and Richardson (1980) perform a similar exercise for a 50 per cent cut in US tariff rates. Their analysis excludes a group of quota-restricted products that were responsible for important welfare gains in Magee's analysis. They include estimated costs for the adjustment of firms' capital stock, and take into account information on economic and social characteristics of workers displaced from import competing sectors in order to calculate the adjustment costs for labor. In their set-up the bulk of the adjustment will take place in the first year after tariff reduction, with the remaining changes following in the second year. While their results show that an important group of industries will suffer negative welfare effects during that first year of adjustment, for all industries combined the net welfare effect is positive even in the first year. Labor turns out to bear nearly 90 per cent of total adjustment costs. For the long-run, the three authors find a ratio of costs to gains from trade liberalization— 4 per cent—very similar to that found by Magee (1972).

Other studies have focused on particular industries, with the advantage of being able to use more detailed/precise data. De Melo and Tarr (1990) use a computable general equilibrium (CGE) approach, which allows for economy-wide resource constraints and inter-industry linkages, to quantify the welfare effects and resource shifts implied by a removal of US quantitative restrictions in textiles and clothing, steel and autos.<sup>21</sup> They find that less than one-quarter of one-per cent of the US workforce would have to change jobs as a result of the elimination of import quotas on textiles and clothing, steel and cars. They base their measure of adjustment costs on the discounted value of earnings losses suffered by the dislocated workers during the first six years after the trade liberalization.<sup>22</sup> Gains from the quota elimination are so large—recall that due to the additional distortions created by quotas, the elimination of quotas brings higher welfare gains than the elimination of equivalent tariffs—that already in those first six years that carry the whole adjustment burden, adjustment costs represent only 1.5 per cent of the gains from trade liberalization.

A similarly small role for adjustment costs is found by Winters and Takacs (1991) in their analysis of the British footwear industry. They estimate that the quantitative restrictions in effect in 1979 prevented the displacement of only 1,064 workers. Their measure of adjustment costs is based on income losses from unemploy-

ment of those displaced workers following removal of the quotas. The expected duration of unemployment is calculated taking into account the industry's normal turnover rate and assuming that displaced workers return to the footwear industry when vacancies are available. Using different scenarios, the authors find that all displaced workers regain employment after 5 to 21 weeks. This results in relatively small adjustment costs, while quota elimination results in significantly lower prices of imported footwear and thus large welfare gains. Their results point to a ratio of costs to gains from liberalization of 0.5 to 1.5 per cent for the first year after quota elimination.

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largely rebounded since 1996 suggests that the adjustment process lasted about seven years. During this adjustment process many workers moved to high-end manufacturing jobs, while at the same time there were dramatic productivity increases in lowend manufactures.<sup>23</sup> Both aspects reflect important long-run efficiency gains from trade.<sup>24</sup>

Bentivogli and Pagano (1999) analyzed the effects of trade with the newly industrialized Asian economies on the labor markets of Germany, France, Italy and the United Kingdom. The analysis confirms that, despite the growing importance of this trade, problems in the European labor market cannot be explained by the increase in imports of manufactures from the Asian countries. In particular, the authors find that workers' personal characteristics (gender and education) are significantly more important than exposure to import competition in explaining unemployment.

Empirical evidence suggests that short-term increases in unemployment are a possible but not a likely consequence of trade liberalization in developing countries

A comprehensive retrospective World Bank study of trade reforms conducted in developing countries found that in eight out of nine countries manufacturing employment was higher during and one year after the liberalization period than before (Papageorgiou et al. 1990).<sup>25</sup> Only in Chile did manufacturing employment decrease significantly during and after trade liberalization.<sup>26</sup> It has been argued, however, that institutional factors rather than trade liberalization explain this development.<sup>27</sup> This view was confirmed by the analysis of Cox Edwards and Edwards (1996), who find that the effects of working experience and schooling outweigh the effects of trade liberalization on a Chilean worker's probability of becoming unemployed, as well as on the duration of unemployment.

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Political economy considerations play a role, in particular the
well known fact that while the gains from trade liberalization
often are spread thinly across the economy, the adjustment
costs tend to be focused on particular groups of workers,
entrepreneurs and owners. In other words, adjustment costs
that are very small for the economy as a whole can be very
large for particular groups, giving those groups a strong
incentive to organize, lobby and otherwise apply political
pressure to maintain protection. A related problem is that
political leaders know that the workers who would lose their

jobs as a result of trade liberalization are aware of this (and thus are unlikely to vote for them in the next election), while the workers who get the new jobs in the expanding export sector are unlikely to link the existence of those jobs to trade liberalization (and thus are unlikely to reward the political leaders by voting for them). This raises the question whether governments should assist affected persons and whether they should do this in order to facilitate adjustment, for distributive reasons or for political reasons. Sections IV and V take up these questions.

# IV. Why it is important to distinguish between adjustment effects and other income effects of trade reform

It has been pointed out above that adjustment to trade reform can take two forms. First, companies are forced to reduce production and some or all of their workers and capital become temporarily unemployed. Second, companies—either exportoriented or import-competing facing new competition—try to enhance their competitiveness in the face of new competitive pressure. Economists typically only refer to the first situation when speaking about adjustment to trade liberalization. The investment decisions of exporting firms that wish to expand production or import competing firms trying to regain competitiveness tend not to be treated as an "adjustment" problem. Indeed, government interventions aimed at influencing investment decisions of firms tend to be treated as issues of industrial policy rather than adjustment to trade.<sup>29</sup>

However, policy makers use policy instruments meant to facilitate "adjustment" in both situations: when companies

reduce production and production factors must be relocated, and when companies try to enhance their competitiveness. Adjustment plans presented in the context of safeguard measures under WTO agreements for instance in many cases refer to companies' efforts to improve competitiveness.<sup>30</sup> Domestic adjustment assistance often tends to have both components, assistance to displaced workers and assistance to companies.<sup>31</sup>

Both components have therefore been included in the discussions presented in this Section. While Section A presents the case of workers moving from a shrinking industry to an expanding one, Section B will discuss the issue of companies adjusting in order to "survive" foreign competition or to expand exports.<sup>32</sup> A third section notes that because workers and firms facing adjustment costs often resist trade liberalization, policy makers may wish to take this into account when designing domestic policies.<sup>33</sup>

### Box IV.1: US Trade Adjustment Assistance Program

The US Trade Adjustment Assistance Program is the only adjustment program which is specifically targeted at trade-induced adjustment problems and which is not limited to particular sectors or regions. It is subdivided into two elements: "Trade Adjustment Assistance to displaced workers" and "Trade Adjustment Assistance to firms and industries".

The objective of the worker assistance program is to reduce temporary adjustment costs, not to compensate for permanent income losses. The TAA Program provides aid to workers who lose their jobs or whose hours of work and wages are reduced as a result of increased imports. It offers a variety of benefits and reemployment services to assist unemployed workers prepare for and obtain suitable employment.

The objective of the TAA firm assistance program is to help manufacturers and producers injured by increased imports prepare and implement strategies to guide their economic recovery. It does this by providing technical assistance to trade-impacted firms.

The worker assistance program is by far more important than the firms assistance program. In 1997, the former expended US\$ 280 million for assistance to workers while expenditures on the firms program amounted to US\$ 8.5 million.<sup>34</sup> Corresponding figures for 1991 were US\$ 115.7 million for workers and around US\$ 10 million for firms. NAFTA-Related Assistance to workers in 1997 amounted to US\$ 49 million.

It has recently been suggested that assistance to trade-impacted workers should include compensation for permanent income losses. A wage insurance scheme has therefore been proposed as an alternative to TAA for displaced workers.<sup>35</sup> This wage insurance scheme would entitle eligible workers to receive some fraction of their wage loss for a limited number of years following the initial date of job loss.

<sup>&</sup>lt;sup>29</sup> Industrial policy is an attempt by a government to shift the allocation of resources to promote economic growth (Krugman and Obstfeld (1991)), whereas this chapter focuses on government attempts to assist companies in an adjustment process. The aims of government policy is thus rather different in the two cases, but we will see that the tools available to governments are very similar in both cases.

<sup>30</sup> See the cases for the Brazilian toy industry and US lamb.

<sup>&</sup>lt;sup>31</sup> See, for instance, Boxes IV.1 and IV.2.

For presentational reasons we chose to consider capital as being a production factor belonging to the firm. Issues related to adjustment of capital will thus be treated in Section B, where we discuss the challenges firms face when trying to adjust.

## A. Workers and adjustment

Much of what has been said and written about the effects of trade and trade liberalization on wages focuses on the long-term effects on wages, and not on the short-term effects of the adjustment costs associated with trade reform. For the policymaker, it is important to distinguish between the two, as they raise different issues for government intervention. The size of the transitional adjustment costs is related to the speed and efficiency of the adjustment process, and can influence the level of political resistance to trade policy reform.<sup>39</sup> Government intervention designed to reduce adjustment costs would thus take place primarily for efficiency or political reasons. In contrast, the long-term effects of trade liberalization may lead to changes in the distribution of income among different groups of workers. If there is a risk of a relatively permanent increase in inequality within the country, policy makers may consider intervening for equity reasons. As we will see below, the nature of the needed government intervention is very different in these two cases.

#### 1. How are workers affected by adjustment costs

Adjustment costs can appear in many different forms to a worker who leaves a shrinking industry to find a new job in another, growing industry:

 costs related to finding and taking up a new job (travel costs, moving costs);

- loss of income during the transition from the old job to the new one (unemployment benefits and/or temporary employment obviously help, but seldom replace 100% of the former wage); and
- costs related to obtaining the skills needed for the new job. 40

A variety of factors can influence the size of these costs. For example, if the economy is booming and the unemployment rate is low, finding and getting started at a new job can occur fairly quickly, and vice versa if the economy is stagnant or in recession and the unemployment rate high. If the declining industry was a major employer in the area and the displaced workers have to move to another region in order to find work, the costs of finding and taking up a new job are bound to be higher than if a new job can be found in the same area. For workers who already have considerabd in pT of

rious. ** It turns, iir ract,	into an investment deci	Ision. Immediate		

average, import-impacted workers who were actively in the labor force at the time of the interview (1972) had been unemployed for 31 weeks.<sup>52</sup> Richardson (1982), analyzing a 1979 survey of workers who were recipients of US Trade Adjustment Assistance in 1976, found 42 weeks as the mean duration of the first unemployment spell suffered by permanently displaced workers in this sample.

Long-term wage losses do not fall under the concept of adjustment costs as it is used in this Special Study. 50 Indeed, workers would suffer these losses even if changing jobs were instantaneous and frictionless. Affected workers, though, will not bother much about this distinction. Wage losses and adjustment costs will both represent reasons for them to oppose trade liberalization. For policy makers, on the other hand, it may be important to have a notion of the size of permanent wage losses compared to adjustment costs. In particular, government programs aimed at reducing adjustment costs for displaced workers, may not be successful in reducing the opposition to trade reform, especially if concerned workers also suffer significant long term wage losses not taken into account in the adjustment program. 51

# Displaced workers are likely to go through significant spells of unemployment

The duration of unemployment and the expenses for training are important determinants of the adjustment costs incurred when changing jobs. The studies discussed in Section III made assumptions with regards to the first variable in order to calculate the costs of adjustment for the economy as a whole. Magee (1972) assumed that the duration of unemployment for workers released from the import-competing sector would be higher than the roughly 10 weeks known to be the average duration of unemployment in the US at the time. He therefore used a duration of unemployment of 16 weeks for his calculations.

This is significantly lower than the average duration of unemployment Bale (1976) found when interviewing US workers displaced as a result of trade liberalization in 1969-1970. On

earnings losses in the short-term.<sup>55</sup> Over the period 1981-95, real weekly post-displacement earnings were 13 per cent lower than pre-displacement earnings. This loss is partly due to the inability

With the exception of the study by Haynes et al. (2000), the above evidence is based on surveys or databases of displaced workers. It therefore does not provide any information on workers that quit voluntarily. Yet it is not unlikely that in a declining company/industry, those workers with the best re-employment

in autarky. If in addition the government intervened in the functioning of the market, for instance through regulation, it may have been virtually impossible for companies to employ the most efficient technologies.<sup>62</sup>

Firms that were not functioning in a competitive environment under autarky may find it profitable to invest in new technologies when trade is liberalized

In many countries, sectors like telecommunications, public transport and banking have traditionally been run by monopolies and/or under heavy regulation by the government. While in some countries, these sectors have progressively been submitted to increased competition, in others the situation has not changed. In the banking sector, for instance, regulation may take the form of government fixed interest rates, fees and commissions, restrictions on the entry and exit of banks and restrictions related to the activities carried out by existing banks. Banks operating in such an environment are not accustomed to choosing activities

in order to maximize profits and are not used to dealing with variable prices (i.e. interest rates, fees, commissions). If confronted with foreign banks that are used to act in a competitive environment, they would probably have difficulties to survive unless they adjust. Introduction of new technologies and appropriate training, for instance, would bring them a long way to be able to survive in a competitive environment, in which foreign companies are also operating. Yet this would require investment and probably time. In other words, companies would need to go through an adjustment process. See Box IV.4 for an example of a sector that is considered to have gone very successfully through such an adjustment process.

If the technology used by foreign competitors becomes available only after trade liberalization, firms may find it profitable to invest in new technologies when trade is liberalized

Another reason why domestic companies are not operating as efficiently as they might could be that they simply do not have

## Box IV.4: Successful adjustment in the Spanish Banking Sector

Although the Spanish Banking System can be considered a competitive sector today, the situation was completely different twenty years ago when it was subject to strict regulations, which affected interest rates, fees, commissions and branching and involved limits on the range and type of activities that financial institutions could perform and on the entry of new competitors. The result of this regulatory framework was a lack of competitive pressure which led to a lack of innovative processes being pushed forward by private initiative.

This panorama has changed substantially over the past decades due to the opening to European competition and the impact brought about by European Directives and the Single Market Program (SMP). The Single Market Program increased the scope for foreign competition within the EU as it removed important barriers to trade in financial services. Major steps occurred in 1993 with the introduction of the "single passport" for financial institutions and the removal of exchange controls. The "single passport" meant that any credit institution authorised to conduct financial activities in its home country was allowed to conduct the same activities in any other member state. The directive thus allowed free foreign competition within the EU. The removal of exchange controls meant funds could be moved, or borrowed abroad to take advantage of banking services provided. Given the internal domestic distortions in countries like Spain, intense foreign competition could have strained their domestic banking sectors, possibly even leading to bank failures and macroeconomic instability.

Aided by a favorable macroeconomic environment, Spain embarked on a major deregulation process before the introduction of the "single passport" in order to prepare domestic companies for foreign competition by increasing their own competitiveness. Among the most important reforms in the late eighties were the elimination of most legal differences between commercial and savings banks; the deregulation of interest rates; and the harmonization of prudential regulation with those in the EU, which took place in 1989. These reforms implied that banks had to function in a more competitive environment with flexible prices and the possibility of exit of existing banks and the entry of new domestic banks. Besides, banks were aware that the introduction of the "single passport" in 1993 would make it possible for foreign companies to enter the market. By that time, however, the Spanish banking sector had already adjusted to the new situation and it is generally accepted that it had done so in a very successful way.

The increase in competition led to major efforts by banks to reduce operational costs. At the same time, there was an attempt to increase the switching costs for consumers, which lead to an expansion in the number of branches and an increase in the quality of services. Interest margins decreased significantly, showing that consumers have largely benefited from the changes. Though foreign banks did enter the market as a consequence of the SMP, entry was not massive and it was more important in numbers than in size. Foreign banks also tended to focus on particular market segments where they often did not compete with domestic firms. Employment in the Spanish banking sector actually expanded and the Spanish banking system is today considered to be very healthy in terms of capitalization, profitability, quality of service, stability and competitiveness. Besides, Spanish banks expanded their activities to foreign markets, in particular in Latin America. Without the deepening of the liberalisation process, the international expansion of Spanish banks would probably not have happened.

Based on Pastor et al. (2000) and Vives (2000).

<sup>62</sup> Placing ourselves in a Heckscher-Ohlin framework, we are assuming that an investment would allow the import competing sector . TD -0.02r .alityc6hN 100.375 n 76.52hpanish sols

access to the newest technologies. In the late seventies, for instance, Japanese companies very successfully entered several American product markets because they supplied comparable goods at lower prices than their American competitors. In some cases they were able to do so because of significantly lower production costs, thanks to the introduction of "just in time delivery." <sup>63</sup> In reaction to this, many American suppliers decided to adapt their production process and to make the investments necessary to apply just-in-time delivery themselves.

Firms that are competing in differentiated goods may find it profitable to invest in quality upgrading after trade liberalization

In a situation involving intra-industry trade—that is, trade in



When import surges are only temporary it may be optimal for domestic competitors to "do business as normal" making low profits or even incurring losses

So far we have been looking at the effect of permanent trade liberalization on the economies involved. Such changes would have a permanent effect on the relative supply and demand of the relevant goods in trading economies. But it also happens that the supply or demand of a good changes only temporarily.<sup>70</sup>

Imagine a country hit by a natural catastrophe. It will take the country some time to recover from this catastrophe and during this time significantly less money will be spent on luxury goods, like new cars. If cars are imported, a foreign producer of cars will see his demand decline in the country hit by the catastrophe, but he knows that this is likely to be only a temporary phenomenon. He decides not to reduce production and rather to ship cars to a third country to which he usually does not export, and where he offers the cars at a reduced price. The third country has a domestic car industry that suffers from this sudden and probably temporary surge of imports. Profits of domestic companies go down, they may even face losses, but losses that are presumably temporary.<sup>71</sup> If producers know that the surge in imports is temporary, they may well decide to keep on producing like before and run losses during some periods rather than reduce production or close down completely. In other words, they may want to try and avoid "adjustment", but the question is whether they can afford to do so.

A recent example of temporary changes in the trading environment are US retaliatory tariffs on EU luxury goods in reaction to the EU's policy on banana imports. The list of goods on which tariffs apply changed every six months. As a consequence, European exporters and US companies depending on their products knew that they would be only temporarily affected. In many cases they therefore decided to do business "as usual", but Box IV.7 shows that not all of them could cope.

# C. Adjustment costs and resistance against trade liberalization

Policy reforms tend to create both winners and losers within an economy. Not surprisingly, those who lose will tend to be against the relevant reform and, depending on the size of the losses involved, they may try to put pressure on the government to impede

or reverse the policy reform. Trade reform is no exception to this. 72 It has been pointed out before that consumers are the main beneficiaries of trade liberalization. The benefits of trade liberalization are thus spread over the general population, which makes it difficult to rally the beneficiaries as a lobby group in favor of trade liberalization. When it comes to the losers, it is necessary to distinguish between short-run losses (adjustment costs) and long-run losses. Some people will suffer adjustment costs that are typically temporary and some will suffer losses in the long-run due to the distributional effects of trade reform. These two groups will typically overlap but not be identical. What does this imply for the resistance against trade reform and its chances of success?

Policy makers may want to intervene in the adjustment process in order to mitigate resistance against trade reform

By definition, adjustment costs associated with trade liberalization will tend to be concentrated in those sectors of the econominal whole actions and the econominal will be a sector of the econominal whole actions and the econominal will be a sector of the econominal whole actions and the economic actions are also as the economic actions and the economic actions are also actions as the economic actions and the economic actions are also actions as a second action actions are also actions as a second action actions are also actions as a second action action.

# V. Governments can facilitate the adjustment process

### A. Domestic institutions and policies

This Section will show that domestic institutions and policies, and therefore policy makers, have an important impact on the size of adjustment costs workers and firms face as a consequence of trade liberalization. We will discuss the main markets and mechanisms influencing the size of adjustment costs and/or the efficiency of the adjustment process. We will also discuss how domestic policies can be employed to facilitate adjustment by lowering adjustment costs or improving the functioning of relevant markets.

#### 1. Credit markets and social safety nets

# The insufficient functioning of credit markets can severely hamper adjustment

Because credit markets do not always function efficiently, individuals and companies may face credit constraints and not be able to obtain the funding necessary for adjustment-related investments, even though they would be able to pay the loans back. Clearly in such a situation, the adjustment process can be severely hampered. Moreover, as capital markets tend to be less sophisticated in developing countries than in industrialized countries, adjustment problems due to credit constraints are more likely to occur in the developing world.

Administrative controls of interest rates, barriers to entry in the banking sector, the existence of directed credit programs and the public ownership of banks are among the most frequent factors that obstruct the smooth functioning of financial markets in developing countries. 76 Administrative controls often lead to interest rates being artificially low. Instead, barriers to entry limit competition in the financial sector, which tends to result in high interest rate spreads harming both lenders and borrowers. 77 In this situation, interest rates are not market determined and therefore do not reflect equilibrium rates. Funds will tend to be allocated inefficiently and may serve to finance unprofitable projects, while profitable ones do not find funding. Directed credit programs and publicly owned banks often serve more explicitly the purpose of funding government selected investment projects that are not necessarily the most profitable ones in the economy. 78

# Small companies are more likely to suffer from credit constraints than big ones

When it comes to companies requiring investment loans, it seems that small companies will suffer from credit constraints more often than larger firms. This seems to be the case in both industrialized and developing countries. The US Trade Adjustment Assistance focuses in particular on small and medium sized companies. The World Bank (1997) notes that "lack of access to

finance for new investments" was the most severe constraint small firms in Ghana faced after trade reforms in 1983. Also Bigsten et al. (1999), in a study on Cameroon, Ghana, Kenya, Zambia and Zimbabwe, find that small firms tend to face greater credit constraints than large firms.

Jaramillo and Schiantarelli (1996) carried out an econometric analysis on the determinants of access to long term debt in Ecuador. They found that the main determinant of the probability of obtaining long term credit is firm size, with the probability decreasing the smaller the firm. They suggest several reasons for this. The most straight-forward one is simply that the availability of collateral is a prerequisite to obtain long-term credit. Moreover, larger firms tend to be more profitable in Ecuador, and it should be expected that "better" companies more easily obtain long-term credits. The authors also suggest that larger firms are likely to have better bargaining power and greater political influence in obtaining long-term financial resources.

# Credit assistance can be very costly for an economy if directed to companies that cannot be competitive in the long-run

Distortions in credit markets give scope for government intervention, for instance in the form of credit assistance. This, however, involves difficulties when it comes to selecting creditworthy adjustment projects. It is not in the government's interest—or within its power—to assist every company encountering difficulties in the face of foreign competition (lack of competitiveness may be the result of bad management, for example). An investment plan should therefore be required in order to choose creditworthy projects. Firms may require assistance for making such an adjustment plan, in particular small or medium firms, and firms' participation in the costs of the investment project increases the incentives for firms to carry out the project properly.

Another option that might be helpful in certain situations would be to announce trade liberalization in advance, giving firms an opportunity to fund adjustment-related investments out of profits *before* increased import competition begins to put pressure on profit margins. The credibility of pre-announced trade reforms would be crucial since firms will not begin to adjust unless they are confident the government will not back down on the promised reforms.

#### Social safety nets can help workers cover adjustment costs

Also workers may require funding during the adjustment process, in particular if they lose their jobs and are temporarily unemployed. An unemployed person who cannot rely on his or her own savings may have to borrow money in order to cover ongoing expenses for food, clothing, housing, etc. Yet, it will be

<sup>&</sup>lt;sup>76</sup> See for instance Laeven (2000).

<sup>&</sup>lt;sup>77</sup> See for instance Barajas et al. (2000) for the case of Colombia, where interest rate spreads surpassed those in developed countries by more than 500 basis points and those of neighbouring economies by more than 100 basis points before financial sector liberalisation.

<sup>&</sup>lt;sup>78</sup> This is for instance reflected in high default rates on loans. Collier and Gunning (1999) mention default rates in the 40-95 per cent rates for publicly owned banks in Africa.

difficult for an unemployed individual to obtain loans, the more so in the absence of collateral. Many industrialized countries have, therefore, installed social safety nets, for instance in the form of unemployment benefits, to help out in these kind of situations. They enable workers to overcome credit constraints and get through the costly adjustment period necessary to switch jobs. In this sense, unemployment benefits can actually enhance adjustment. Note that this is the case for any type of adjustment, not only adjustment to trade liberalization.

Workers may also face credit constraints when looking for funds to invest in training. To obtain funding from private credit institutions for such "investments in human capital" is notoriously difficult. In many industrial countries governments provide publicly-funded retraining programmes to the unemployed.

In developing countries characterized by badly functioning credit markets and a lack of social safety nets, adjustment may cause severe hardship to the poor

Recent macroeconomic crises in Latin America and East Asia have shown that existing safety net mechanisms are too often inadequate in developing countries. Their coverage is limited and leakage is high, or the assistance available is far below demand during a crisis or adjustment period. Adjustment processes can thus have very harsh consequences in those countries, particularly for the poorest. To them, as Winters (2000) puts it, "even switching from one unskilled informal sector job to another could cause severe hardship". Note that, contrary to the case of firms, the pre-announcement of trade reform is unlikely to facilitate adjustment for workers in developing countries. If they could not build up savings in the past, they will be unlikely to have the means to do so during the implementation period of the trade reform.

#### 2. Labor markets

While credit markets primarily determine whether individuals can finance the necessary adjustment costs, domestic labor market characteristics actually affect the size of adjustment costs workers face. In particular, they can affect workers' decisions with regard to adjustment in two ways: they can affect their costs of leaving the current employer and their costs of searching a new job. Labor market characteristics can also affect companies' incentives to create jobs, which will in turn affect the length of time in unemployment and the costs of searching for a job.

Labor market characteristics affect workers' adjustment costs and thus an economy's propensity to adjust

#### Fringe benefits for workers

Workers may find it costly to leave a job if this implies the loss of fringe benefits like claims to a company pension. Workers may also prefer to wait until they are laid off rather than leaving deliberately, if the former gives them the right to claim severance payments and the latter does not. A country's institutional arrangements with regards to these aspects of the employerworker relationship thus affect the potential for adjustment. Industrial countries differ significantly in their labor market charac-

teristics. In Germany, company pension schemes play a predominant role, while they are virtually non existent in other European countries. This makes the German labor market relatively less flexible. According to Maloney (1997), Mexican workers lose generous severance pay and may lose their pensions if they quit. At the same time, in Mexico, roughly 40% of the urban labor force was working in the informal sector in the 1990s and thus in a highly flexible environment. Matusz and Tarr (1999) argue that many developing countries are characterized by this type of dual labor market, with a relatively inflexible formal segment but a highly flexible informal segment. This makes it difficult to evaluate the overall capacity of developing countries to adjust when it comes to trade liberalization.

### • Employment protection versus start-up costs

Adjustment in an industry may involve starting up new firms. Employment protection policies, like large severance payments, may discourage entrepreneurs from hiring workers needed for starting up a new company, since it would be costly to let them go in case the business is less profitable than expected. With regard to this and other start-up costs, it can be argued that developing countries provide a more flexible environment for the creation of new companies than do the industrialized countries, especially when it comes to micro and small-scale enterprises

numbers of workers may be the consequence. Though this does not represent a problem for the economy if these workers easily find new jobs, it may lead to serious problems if bottlenecks occur in the job-search or retraining process.

Minimum wages differ significantly across and within regions. When looking at regional averages, Forteza and Rama (2001) find that the ratio of minimum wages to average labour costs in large manufacturing firms corresponds to 33 per cent in industrialised countries, compared to 30 per cent in Latin American and Caribbean countries and 18 per cent in Sub-Saharan Africa. The corresponding values for Eastern Europe/Central Asia and South Asia are 32 per cent and 44 per cent respectively. Yet significant differences have been observed across countries within one region. A study comparing the minimum wage standardised by the countries' mean wage in Latin American and OECD countries finds that minimum wages in Uruguay, Bolivia, Brazil, Argentina, Chile and Mexico are lower than in any OECD country. Venezuela, El Salvador, Paraguay and Honduras, instead, score among the highest.<sup>81</sup>

#### "One company towns"

Adjustment to trade liberalization may also be more drastic when important spillovers exist between the shrinking import competing sector and other parts of the economy. This may, for

Rama (2001)).<sup>85</sup> The percentage is on average 37 per cent in industrialised countries, significantly higher than in Latin America and the Caribbean (19 per cent), the Middle East and North Africa (17 per cent), Sub-Saharan Africa (10 per cent) and South Asia (9 per cent). Whether and to what extent a high level of unionisation leads to political resistance, for instance in the form of strikes, depends on many other factors, such as the relationship between unions and the political leadership. France was, for instance, one of the European countries with the highest number of strikes and lockouts in 1990 (1529), although it has a relatively low level of unionisation (14.5 per cent in 1985 and 9.1 per cent in 1995). Compare this to Austria, a country with a significantly higher level of unionisation (51 per cent in 1985 and 41.2 per cent in 1995) and a very low number of strikes and lockouts (9 in 1990).<sup>86</sup>

Empirical analysis suggests that labor market characteristics have negative effects on adjustment if they enable organized labor to delay or water down planned reforms

To our knowledge Forteza and Rama (2001) is the only study comparing the impact of different labour market characteristics on an economy's propensity to adjust.<sup>87</sup> They include in their analysis, in addition to minimum wages and non-wage costs, the level of unionization and the size of government employment in their measures of labor market rigidity (these two indicators are assumed to capture the ability of potential losers from reform to express their grievances). Their empirical analysis shows that countries where organized labour is influential experience recessions right before adjustment, and slower recovery afterwards, whereas growth performance is not affected by the level of minimum wages and non-wage costs. These results suggest that labour market characteristics affect adjustment through political mechanisms rather than economic ones.

## 3. Education and training

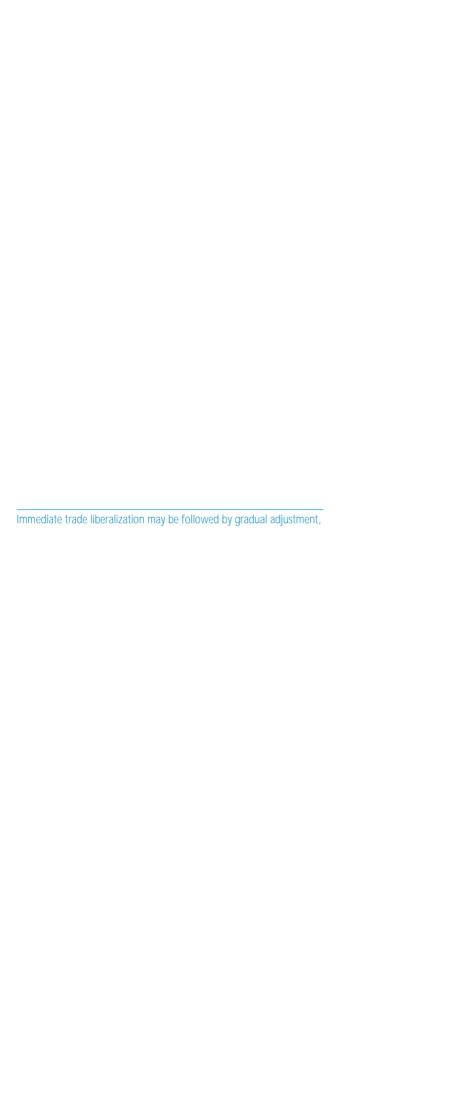
In some industrialized countries, it is compulsory to participate in certain training courses in order to receive unemployment benefits. Such courses often aim at assisting workers in the search process directly, for instance by teaching them how to apply for a vacancy and how to conduct a job interview. Training may also aim at providing unemployed workers with skills that are in high demand. In the context of the privatisation of Brazil's Federal Railway, for instance, an attempt was made to adapt training courses to the particular needs of laid-off workers.88 For this purpose, regional labour markets were studied in detail by labour market specialists in order to determine the nature and composition of the market relative to supply and demand. In the case of trade liberalization, specially designed training courses could target the skills demanded in export industries which are expanding as a result of the reform. Trade reform may justify the temporary creation of such training centers, in particular in those countries that do not normally provide these types of services to their unemployed.

prices ranked as the fourth and fifth problems for manufacturing firms in a survey of firms in seven African countries, after lack of credit, lack of demand, and high taxes.

#### 5. Information and expectations

In the absence of reliable information about prices and market opportunities workers and firms may not switch towards new activities after trade liberalization

In order for companies (and workers) to even consider adapting to a new trade policy, they must have information about the new policy. The policy must seem credible to them and they must be able to judge the new opportunities created by this new policy. It is questionable to what extent reliable sources of information about prices and market opportunities are available in developing countries.



national private sector activity in general.<sup>97</sup> Those repercussions represent externalities which, if not taken into account, may result in excessive layoffs. Gradual trade liberalization may in these cases manage to soften the adjustment process. This argument may in particular apply to developing countries, in particular small ones, as the composition of their exports is often characterized by a lack of diversification.<sup>98</sup>

Gradual trade liberalization has also been discussed in the context of government credibility. Depending on a country's

#### Box V.3: The importance of credibility: why farmers did not plant new cashew trees in Mozambique

In the early 1990s the World Bank prevailed on Mozambique's government to liberalize the cashew sector and to remove restrictions on exports of raw cashews. Export liberalization was expected to lead to an increase in farm gate prices that would benefit poor farmers directly. It was also hoped that this would in the medium- and long-run reinvigorate the rural sector by reversing the dramatic collapse in cashew tree planting.

Although raw cashew prices did indeed increase after export liberalization, farmers refused to plant new trees. McMillan et al. (2002) argue that this lack of adjustment was to a large extent due to the fact that the government's change in policy and the resulting price changes were not considered to be credible and that a policy reversal was expected.

Farmers spend typically around 50% of their time caring for existing cashew trees prior to harvest. Cashew trees take from 3-5 years to bear any fruit at all and take longer to bear enough fruit to make the investment worth while. In order for farmers to plant new trees it is therefore important for them to believe that future cashew prices will be high enough to allow them to recover their investment. Simple promises by the government for prices to increase may in such a situation not be credible enough in the absence of a commitment mechanism. In the case of Mozambique credibility of the trade reform may have been particularly low because it had not been undertaken of the government's own volition.

McMillan et al. (2002) argue that credibility could have been increased by the removal of structural constraints like poor roads, lack of access to credit, or monopsony power on the part of domestic traders. Such non-price reforms are harder to reverse than trade policy reforms and may therefore be more effective in increasing the expected profitability of investment from the farmers' point of view, thus eliciting stronger supply responses.

Based on McMillan et al. (2002)

governments consider joining free trade areas or multilateral agreements like the WTO.

The European Union has often been put forward as an example of the importance of international agreements for enhancing the credibility of trade reforms. It has for instance been argued that European Union membership was a crucial factor in determining the credibility of financial sector reform in countries like Spain and Portugal. It played a large role in convincing financial institutions that the move towards internationalization of financial services within the European Union was irreversible and that a timely adjustment was necessary in order to survive (Vives (2000) and Gardener et al. (2000), see also Box IV.4).

# 4. Export promotion and the expansion of exporting sectors

The adjustment process following trade liberalization typically involves labour and capital moving from shrinking import-competing industries into expanding export industries. The expansion of exporting industries is thus important in order for the adjustment process to be smooth. If inefficient credit markets hinder the expansion of potential exporters, adjustment may be hampered and government intervention in favor of exporters may be warranted.

Export expansion may be more difficult when it implies moving into completely new export activities. It has been argued in Section IV.B that starting up new export activities tends to be more complex and costly for companies than expanding existing ones. Many developing countries, in particular small ones, are characterized by a highly concentrated export structure. <sup>103</sup> In

these countries expanding exports most likely implies that the private sector has to move into new activities. Given the costs and risks involved in such a move, companies are more likely to encounter credit constraints than if they were simply expanding existing activities.

It has also been argued that positive spillovers exist from breaking into new export markets. 104 This would imply that benefits for the country as a whole are larger than those accruing to the company deciding to expand exports to new markets. If this is correct, there is a case to be made for government support for export promotion independent of whether the credit market is functioning efficiently.

Aitken, Hanson and Harrison (1997) cite the example of garment exports in Bangladesh as a case that suggests that this type of spillover may be important. The entry of one Korean garment exporter in Bangladesh led to the establishment of hundreds of exporting enterprises, all owned by local entrepreneurs. Garment exporters, which accounted for a negligible percentage of total export earnings, became the single largest source of foreign exchange earnings after the entry of one multinational firm.

Active export promotion by the government can be defended on economic efficiency grounds if exporting involves positive externalities

Spillovers may take a variety of forms. Exports may require specialized transportation infrastructure, such as storage facilities or rail tracks. Once it is built any additional exporter can take advantage of its existence. The presence of other exporters may also improve access to information about foreign demand.

<sup>103</sup> See footnote 98

<sup>104</sup> Robert and Tybout (1997) test for a second type of externality, i.e. the one that exporting increases the productivity of companies (learning from exporting). They however find little evidence for the existence of this effect.

under the GATT was and continues to be gradual, and from the number of tariff peaks that continue to characterize trade regimes around the world.

Another important theme developed in this section is the additional scope for managing adjustment that is available to developing countries, and in particular to the least-developed country Members.

A. Transition periods, implementation periods,

GATS states that schedules shall specify the date of entry into force of commitments but it also offers Members the possibility to specify "where appropriate, the time-frame for implementation of commitments". In most cases however Members have not used the possibility to schedule transition periods. Commitments entered into force in 1995. 110

In the schedules annexed to the fourth and, to a lesser extent, to the fifth protocol to the GATS Agreement, some governments have chosen to delay the entry into force of specific liberalization measures. In their schedule of concessions, Antigua and Barbuda for example have entered several measures limiting access to voice telephone services that will apply until 2012 but be eliminated thereafter. In the Schedule of specific commitments of the European Communities and its Members, delayed dates for the liberalization of telecommunications are indicated for Ireland, Spain, Portugal and Greece. 111 The Schedule of Commitments of Panama also provides for the progressive opening of the domestic telecommunications market over a period of 5 years starting on the date of accession. The presence of delays may be related to the fact that the sectoral nature of the negotiations on these topics did not allow the same flexibility in terms of coverage than a broader negotiation.

#### (c) Rules and obligations

The implementation of rules and obligations can involve adjustment effects like those induced by reductions in tariffs and quotas. They can also affect two other adjustments: changes in national legislation, and government investment—in particular in developing countries—in building up institutions and staff training. This was certainly the case with the TRIPS Agreement, but also with rules on customs valuation and rules on sanitary and phytosanitary measures.

Because adjustment to the new rules and obligations imposed by these Agreements was not expected to involve significant adjustment in the developed countries, there is no general implementation period available to all Members under the SPS or the Customs Valuation Agreements. The TRIPS Agreement provides for a one year implementation period following the entry into force of the WTO Agreement. As discussed below however, developing countries negotiated special implementation periods for each of the three agreements.

#### 2. Additional flexibility for developing and leastdeveloped countries

	Developed countries	Developing countries	Least developed countries
Reduction of tariffs on industrial products	gradual over 4 years with f	lexibility	
Reduction of tariffs on agricultural goods	gradual over 6 years	gradual over 10 years	no reduction commitments
Elimination of tariffs on information technology products under the ITA	gradual over 4 years but, ir	principle, possibility to opt out	
Reduction of agricultural export subsidies	gradual over 6 years	gradual over 10 years	no reduction commitments
Reduction of agricultural domestic support	gradual over 6 years	gradual over 10 years	no reduction commitments
Elimination of quotas on textiles	gradual over 10 years		
Implementation of obligations under the TBT Agreement		time limited exceptions can b	e granted upon request
Implementation of obligations under the SPS Agreement		time limited exceptions can be granted on request; may delay implementation up to 2 years	time limited exceptions can be granted on request; may delay implementation up to 5 years
Obligations under the Agreement on customs valuation <sup>117</sup>		5 year delay on implementati for application of specific pro	
Implementation of obligations under the Agreement on Import Licensing Procedures		2 year delay	
Implementation of obligations under the SCM Agreement		prohibition of subsidies contingent upon export performance applies only	prohibition of subsidies contingent upon export performance dopli nnr15p0rtrl

#### Extending the transition periods

The drafters of the WTO Agreements were wary of extending transition periods. Footnote 4 in Article XI of the Marrakesh Agreement states: "A decision to grant a waiver in respect of any obligation subject to a transition period or a period for staged implementation that the requesting Member has not performed by the end of the relevant period shall be taken only by consensus." Nevertheless, several Uruguay Round Agreements offer developing countries the possibility to request extensions of transition periods as part of special and differential provisions. Agreements which offer this possibility include: the TRIMs Agreement, the Agreement on Subsidies and Countervailing Measures, and the Agreement on Implementation of Article VII (customs valuation).

The extension of transitional time periods for developing countries has recently been discussed in the WTO. During the preparatory process for the Third WTO Ministerial Conference in Seattle, a number of developing countries put forward a wide range of proposals dealing with their perceived problems in the implementation of WTO Agreements. Among those, many called for an extension of the transition periods to comply with some agreements. The expiry of several transition periods at the end of 1999 gave additional impetus to the debate on the implementation of Uruguay Round Agreements and in particular the extension of transition periods. In at least two cases, the TRIMs and the Customs Valuation Agreements, requests for extensions were submitted before 1 January 2000 which had to be approved by other WTO Members.

In the case of the Customs Valuation Agreement, Annex III of the Agreement on the implementation of Article VII of GATT 1994 stipulates that if the five-year delay in the application of the provision of the Agreement by developing country Members provided for in Article 20 is insufficient in practice for certain Committee is reviewing those requests, and provided that the programmes notified pursuant to the procedures in G/SCM/39 meet the eligibility criteria and transparency requirements set forth therein, Members of the SCM Committee shall grant extensions on a year by year basis, subject to annual review, until the end of 2007 with then a final two-year phase-out (i.e., through the end of 2009), unless a further extension on the basis of Article 27.4 alone is requested and approved. In addition to the fast-track requests, the Committee has received and is considering five other requests, based on Article 27.4.125

The length of transition periods is only one of the elements addressed in the implementation debate but it is the one that is most closely related to adjustment problems. In many cases, proposals go beyond genuine implementation problems in the sense of difficulties experienced with the compliance of existing agreements. Some of the concerns expressed in the proposals relate to what a number of developing countries see as inadequate implementation by developed countries of provisions requiring them to undertake positive actions in favour of developing countries. Others relate to the best endeavours or non-operational nature of many special and differential treatment provisions in WTO Agreements. A third group of concerns relates to alleged abuses of certain provisions of the Agreements, and to the lack of expected market opening in areas of export interest to developing countries. Finally, many proposals aim at modifying provisions in the existing agreements to rebalance the obligations. Many proposals do not really reflect problems that proponent countries may have with adjustment but rather their perception that the agreements are inequitable in the sense that they do not reflect adequately the concerns of developing countries.

#### B. Safeguard measures

The discussion thus far has focused on provisions—in particular transition periods for reducing import barriers, revising domestic legislation and setting up new institutions—which offer Members some flexibility to cope with *anticipated* adjustment problems. Obtaining an *ex post* extension of the transition period would be an option for dealing with unanticipated adjustment difficulties, except that, as noted above, for developed countries the possibility of obtaining extensions is strictly regulated by footnote 4 to the Marrakesh Agreement, while only a few agreements explicitly offer developing countries the possibility of requesting *ex post* an extension of a transition period.

The focus of this section, therefore, is on measures which offer Members the possibility to react *ex post* to problems caused by unforeseen import surges.<sup>126</sup> Such measures are traditionally

termed "safeguards", and include temporary tariff increases or quantitative restrictions. The general view is that without the safety-valve provided by safeguards, governments might be reluctant to liberalize in sectors where there is uncertainty concerning the adjustment process that will follow the liberalization.

Various WTO provisions correspond to this broad definition of safeguards. First, the GATT/WTO framework permits emergency actions under Article XIX and the Agreement on Safeguards, and in addition provides specific safeguard clauses for agriculture and textiles and clothing.<sup>127</sup> Second, it offers the possibility to impose restrictions to safeguard the balance-of-payments under Articles XII (developed countries) and XVIII.B (developing countries).<sup>128</sup> Third, there is the possibility to renegotiate tariffs under Article XXVIII.<sup>129</sup>

Among the three provisions, the one most clearly targeted at adjustment problems is safeguard measures under the Agreement on Safeguards and Article XIX. The balance-of-payments provisions can only be used in reaction to an unsustainable deterioration in a country's external financial position, and not in reaction to sector-specific adjustment problems. Renegotiation generally is not the most appropriate response to a transitional adjustment problem—which is by nature temporary—since renegotiation is a permanent and not a temporary measure. Two other contingent protection instruments, namely anti-dumping measures and countervailing duties are available to WTO Members. Those two provisions, are in principle responses to "unfair" trade practices and thus do not have the same objective as safeguards. However, firms facing adjustment difficulties might prefer to use the anti-dumping procedure rather than a safeguard.

#### 1. Article XIX and the Agreement on Safeguards

The Uruguay Round Agreement on Safeguards, which applies cumulatively with Article XIX of GATT 1994, elaborates on and tightens the Article XIX rules on the use of safeguard measures, re-establishes multilateral control over safeguards and eliminates measures that escape such control. It also explicitly refers to structural adjustment in its Preamble and creates certain mechanisms to address that goal. Article 5 states that safeguard measures shall be applied only to the extent necessary to prevent or remedy injury and to facilitate adjustment. Also, evidence of adjustment is necessary to justify extending a measure (Article 7.2) and progressive liberalization is intended to facilitate adjustment in cases of measures originally imposed for longer than one year (Article 7.4).

There are five elements in the Agreement on Safeguards. The first sets out the requirements that must be fulfilled before a

<sup>125</sup> Those requests were made by Colombia (in part invoking the language in paragraph 10.6 of the Ministerial Decision on Implementation-Related Issues and Concerns (WT/MIN(01)/17) to seek treatment equivalent to that under the fast-track procedures for its programmes of the same type as those covered by the fast-track procedures, and in part on the basis of Article 27.4 alone), El Salvador and Panama, (in respect of their programmes other than those of the type eligible for the fast-track procedures), Thailand, and Uruquay (for the same programme as covered by its fast-track request).

<sup>126</sup> The discussion here is limited to surges in merchandise imports. Concerning services, see WTO (2000) Post Uruguay Round Market Access, which gives an overview of the current negotiations on the question of emergency safeguard measures.

<sup>&</sup>lt;sup>127</sup> GATS Article X mandates Members to undertake multilateral negotiations on the question of emergency safeguard, measures based on the principle of non-discrimination. Negotiations are underway.

<sup>128</sup> GATT Article XVIII.C also makes provision for "infant industry" protection for developing countries. This provision has been little used and is not analyzed further in this text. Current discussions on special and differential treatment, however, suggest that this provision may be subject to closer attention and greater use in the future.

129 Modification of GATS schedules is possible in accordance with the provisions of Article XXI.

safeguard measure can be applied. The second sets out the rules that govern the application of safeguard measures. The third concerns the compensation action to which such measures may give rise. The fourth provides for the elimination of pre-existing grey-area measures and the ban on their future use. The fifth element finally provides the necessary machinery to ensure that the Agreement functions effectively.

Under the Agreement on Safeguards, a Member must determine that increased quantities of imports are causing or threatening to cause serious injury to the domestic industry producing like or directly competitive products. There is no requirement on who may seek relief, or on the initiation of investigations. The determination must result from a proper investigation by the authorities based on published procedures. Unlike Article XIX, the Agreement on Safeguards does not explicitly require that the increase of imports be the result of unforeseen developments or the effect of obligations under the GATT. 130 Because Article XIX and the Safeguards Agreement apply cumulatively, however, unforeseen developments still exist as a necessary "circumstance" to be fulfilled if a safeguard is to be allowed. 131 Serious injury is defined to mean "significant overall impairment" of the domestic industry's position and a "domestic industry" is defined as "the producers as a whole of the like or directly competitive products operating within the territory of a Member, or those whose collective output of the like or directly competitive products constitutes a major proportion of the total domestic production of those products."

Article 4.2 (a) specifies that "in the investigation to determine whether increased imports have caused or are threatening to cause serious injury to a domestic industry, [...] the competent authorities shall evaluate all relevant factors of an objective and quantifiable nature having a bearing on the situation of that industry, in particular, the rate and amount of the increase in imports of the product concerned in absolute and relative terms, the share of the domestic market taken by increased imports, changes in the level of sales, production, productivity, capacity utilization, profits and losses, and employment."

The use of remedies is governed by the principle that they should be applied to a product being imported irrespective of its source, except products from developing countries that are below certain levels of import share (Article 9.1), and only to the extent necessary to prevent or remedy serious injury and to facilitate adjustment. The Agreement defines some limits regarding the allocation of quotas among suppliers, but allows limited departure

from MFN in the form of quota modulation (Article 5.2 (b)). It also establishes a limit on the duration of safeguard measures. The standard limit on duration is four years, which may be extended to a maximum of eight years if it has been determined under the Agreement's procedures that continuation is necessary and that the industry is *adjusting*. Moreover, if the measure is applied for more than one year, it must be progressively liberalized throughout the period of application, and if its duration is more than three years there must be a mid-term review which shall, if appropriate, lead to its withdrawal or more rapid liberalization.

Developing countries are given more flexibility in two ways: the maximum duration of a safeguard measure, including extension, is two years longer than for developed countries (that is four plus six at a maximum) and they are allowed to re-impose a safeguard after a period of non application that is shorter than for developed countries.

The rules concerning compensation have also been changed from those in Article XIX. The Member imposing the safeguard measure consults with those Members which have a principal supplier interest. Failing agreement the affected exporter can retaliate but its right to do so is not unlimited. No compensation however can be required during the first three years in cases where a safeguard is imposed following an absolute increase in imports.

Table VI.2 below presents information on notifications of initiations of safeguard investigations. Note that 33 of the 94 investigations listed in Table VI.2 are ongoing and that 29 "definitive", as opposed to provisional, safeguard measures were in place in July 2002.<sup>132</sup>

Bearing in mind that safeguard measures may be broader in scope than anti-dumping measures, and that when considering anti-dumping actions, each product/country combination is counted as an investigation, while a single safeguard investigation covers imports from all sources, it is interesting to note that the figure of approximately 73 safeguard investigations initiated over the period 1995 to 2001 compares to a total of 1845 anti-dumping investigations launched during the same period. 133

The figures in Table VI.2 show that only about 18 per cent of the Members have notified actions under the Safeguards Agreement, and that each of the Members who have notified actions have only notified a relatively small number of investigations. Developing countries as well as transition and developed countries have made use of the Agreement. The two main users so far have been India and the United States.

<sup>&</sup>lt;sup>130</sup> From a theoretical point of view, the fact that changes are "unforeseen" is crucial for justifying ex-post increases in protection. This raises the issue of what "unforeseen" exactly means. In its Korea - Dairy Report, the Appelate Body draws a distinction between foreseen and foreseeable, and concludes that "foreseen-ness" is what is at issue. This approach seems to be more factual. Trying to determine what is foreseeable would seem to be more theoretical and speculative.

<sup>&</sup>lt;sup>131</sup> See Appelate Body Reports on Argentina - Footwear (WT/DS121/AB/R) and Korea - Dairy (WT/DS/98/AB/R).

<sup>132</sup> In 14 cases, the decision on applying a definitive measures was negative. Five definitive measures have been terminated before cut-off date. Information is not available on the status of 13 initiated investigations.

<sup>133</sup> One explanations for the relatively limited use of safeguards is based on the idea that governments did not use safeguards because using safeguards is costly and there are other instruments which achieve a better result or a similar result at lower cost. In other words, governments prefer to use other measures to react to import surges. Where bound rates are much higher than applied tariff rates, governments could for instance raise applied tariffs without violating their commitments. Supporters of this explanations see a link between on the one hand the prohibition of "grey-area measures", and the discipline imposed on the use of safeguards, and on the other hand, the surge in the use of anti-dumping measures. They claim that safeguards are not used because governments prefer to use anti-dumping measures to react to import surges, mainly because, as discussed below, anti-dumping is a targeted remedy which imposes no compensation or adjustment constraints while safeguards are by nature a multilateral instrument which restricts imports from all origins and which imposes compensation (even if it is only after three years) and adjustment.

	1995	1996	1997	1998	1999	2000	2001	2002*	Total
India			1	5	3	2		1	12
United States	1	2	1	1	2	2	1997		

Table VI.3 below lists the products for which Members have notified initiations of investigations. It shows first that safeguards have been used both for agriculture and industry. It also shows that safeguards have been used in various types of industries. Among the main users, India and Venezuela have used safeguards only for industrial products while the United States, Chile, Jordan, and the Czech Republic, have used safeguards for both industrial and agricultural products.

With regard to the adjustment facilitation role of the Safeguards Agreement, it seems evident that the kind of adjustment the drafters of the Agreement wished to facilitate is the restructuring of industries hurt by import competition, rather than the reallocation of resources released by the contraction of

the import competing sectors. If a government prevents or remedies an impairment in the position of import competing industries, factors of production have no incentive to move and thus there is no reallocation of resources from less efficient to more efficient activities.<sup>134</sup>

An examination of the use of safeguards notified to the WTO confirms the idea that governments use safeguards as a means to offer breathing space to an industry facing import competition, rather than as a means to slow down liberalization to facilitate the exit of workers from that industry. First, some notifications explicitly refer to adjustment in the sense of improving competitiveness. <sup>135</sup> Also countries' safeguard legislation often requires domestic industries petitioning for an investigation to provide an

Table VI.3: Initiations of investigations under the Agreement on Safeguards by country and product – 1995-2002

	Industrial products	Agricultural products
Argentina	- Footwear	- Peaches
	- Toys	
	- Motorcycles	
Australia		- Swine meat
Brazil	- Toys	- Coconuts
Bulgaria	- Non aqueous ammonium nitrate	
-	- Corks	
	- Ammonium nitrate	
Chile	- Tyres	- Wheat, wheat flour, cane/beet sugar
	<ul> <li>Socks (synthetic and cotton)</li> </ul>	vegetable oils
	- Steel	- Liquid and powdered milk
	- Lighters	- Mixed oils
		- Glucose
Colombia	- Taxis	
Costa Rica		- Rice
Czech Republic	- Footwear	- Cane/beet sugar
	- Citric acid	- Isoglucose
	- Wires, ropes and cables	- Cocoa powder
	- Tubes and pipes	
Ecuador	- Sandals	
	- Matches	
Egypt	- Safety matches	- Powdered milk
	- Common fluorescent lamps	
El Salvador	- Fertilizers	- Pork
		- Rice

	Industrial products	Agricultural products
Morocco	- Rubber plates and sheets	- Bananas
Philippines	- Grey Portland cement	- Tomato paste
	- Ceramic floor tiles	
Poland	- Potassium nitrate	
	- Calcium carbide	
	- Steel	
Slovak Republic		- Swine meat
		- Sugar
Slovenia		- Swine meat
United States	- Brooms	- Tomatoes
	- Steel wire rod	- Tomatoes and peppers
	- Line pipe	- Wheat gluten
	- Crab meat	- Lamb meat
	- Extruded rubber thread	
	- Certain steel products	
Venezuela	- Cold rolled steel	
	- Hot rolled steel	
	- Tyres	
	- Paper	
	- Iron/steel U sections	

Cut-off date for the information on safeguards: 30 July 2002.

Source: WTO secretariat, Rules Division, Summary of notifications of initiations and outcomes of safeguard investigations and of applications of safeguard measures since 1 January 1995.

adjustment plan. 136 Compared to Article XIX of GATT 1947 and the pre-Uruguay Round situation, the current provisions under Article XIX and the WTO Agreement on Safeguards are more explicitly designed to facilitate adjustment. They impose tighter disciplines in this area but simultaneously reduce obstacles to the use of safeguards for adjustment facilitation purposes. Article XIX. despite the fact that it does not refer to adjustment, offered governments the possibility to facilitate adjustment in liberalized industries and in particular their restructuring. The new regime leaves less scope for reactions to import surges that escape multilateral control. The Agreement on Safeguards for instance explicitly prohibits the use of VERs in reaction to increased imports. The new regime also tends to discourage the use of safeguards for purposes different than adjustment facilitation by strengthening certain disciplines. The Agreement for example imposes restrictions on the duration of safeguards, and submits extensions of the duration to the requirement to show that adjustment is taking place. It also contains provisions concerning the progressive liberalization and limits on the remedies. Under the previous regime, if the prerequisites were established, governments were allowed to go beyond simply slowing down the liberalization process or just reverting to the pre-liberalization situation. Also, there were no time limits, and in practice safeguard measures tended to become permanent which is certainly not required for adjustment purposes. In a sense, governments were allowed to "prevent" injury to the domestic industry competing with imports, that is they were allowed to durably prevent the reallocation of resources. Finally, as a compensation for the tightening, the new

regime offers an incentive to the use of safeguards in the form of three years for free, that is three years without any obligation to compensate. In a sense, the Agreement on Safeguards reduces the size of the loophole to allow only for measures that are really designed to facilitate adjustment.

#### 2. Other specific safeguards

There is a special safeguard provision in the Uruguay Round Agreement on Agriculture which is available to countries which have reserved the right to invoke this clause by designating products in their Schedules. Article 5 states that for products whose non-tariff restrictions have been converted to tariffs, governments can impose additional duties if either the volume of imports of that product increases above a certain threshold, or the price of imports of that product falls below a trigger price. The level at which the thresholds can be set is explicitly mentioned in Article 5, along with limits on both the level of the additional duty that can be imposed and the period during which it can be maintained.<sup>137</sup>

The main differences from the mechanism set out in the Agreement on Safeguards are the following. First, the special agricultural safeguard provision can remain in place only for the duration of the reform process (its purpose is to offer a guarantee to Members that the tariffication process will not result in an import surge). Second, the special agricultural safeguard does not require the complainant to show that imports caused injury. Third, unlike the "general" safeguard which is largely an *ex post* emergency

<sup>&</sup>lt;sup>136</sup> See for example Thaïland's legislation (G/SG/N/1/THA/2).

<sup>137</sup> In the case of the volume trigger, the higher duties only apply until the end of the year in question. In the case of the price trigger, any additional duty can only be imposed on the shipment concerned. The additional duties cannot be applied to imports taking place within tariff quotas.

measure, the special agricultural safeguard requires governments to decide *ex-ante* where they are likely to encounter adjustment difficulties. Thirty-eight countries, including developing and transition countries as well as developed countries, have reserved the right to apply the special safeguard. Fourth, whereas safeguards applied under the Safeguards Agreement must be applied to imports irrespective of their source, additional duties under the special safeguard mechanism can be applied to specific shipments.

Like safeguards imposed under the Agreement on Safeguards, the special safeguard essentially offers breathing space to producers. It may be used to delay liberalization, but it is not specifically designed to facilitate the reallocation of resources that may become unemployed as a result of increased import competition.

The actual use of the special safeguard has been limited to date. As can be seen in Table VI.4, it was used by just nine

Table VI.4: Use of the Special Agricultural Safeguard mechanism

A. Price-based special agricultural safeguard. Action by Member and product category, 1995-2001 (Number of tariff items)

	CE	OI	SG	DA	ME	EG	BV	FV	ТО	FI	СО	OA	ALL
1995													
EC			10		1	1							12
Japan	1			2									3
Korea	1	2											3
United States	1	1	2	13			1				6		24
Total	3	3	12	15	1	1	1				6		42
1996													
EC			10		4								14
Japan								1					1
Korea	3	2											5
Poland												2	2
United States	4		7	24				2		1	11		49
Total	7	2	17	24	4			3		1	11	2	71
1997													
EC				10	4								14
Korea	1	2						2					5
Poland			1									2	3
United States	3	1	11	34				2			23		74
Total	4	3	12	44	4			4			23	2	96
1998													
EC			9		3								12
Japan	1										1		2
Korea	2	1						2					5
Poland	1											4	5
United States	5		11	35			1	2			20		74
Total	9	1	20	35	3		1	4			21	4	98
1999													
Costa Rica	3							1					4
EC			9		4								13
Hungary			7										7
Japan	4			1				2			1		8
Poland	4		2		96							4	106
Switzerland					77								

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<u>Code</u>	Product category	<u>Code</u>	Product category
CE	Cereals	FV	Fruit and vegetables
OI	Oil seeds, fats and oils and products	TO	Tobacco
SG	Sugar and confectionery	FI	Agricultural fibres
DA	Dairy products	CO	Coffee, tea, mate, cocoa and preparations
ME	Animals and products thereof		Spices and other food preparations
EG	Eggs	OA	Other agricultural products
BV	Beverages and spirit		

#### B. Volume-based special agricultural safeguard. Actions by Member and product category, 1995-2001 (Number of tariff items)

	CE	OI	SG	DA	ME	EG	BV	FV	TO	FI	CO	OA	ALL
1995													
Japan										5			5
Total										5			5
1996													
EC								47					47
Japan	1			14	41					5			61
Total	1			14	41			47		5			108
1997													
EC								46					46
Japan	1			4									5
Korea	2												2
Poland								1					1
Slovak Republic											1		1
Total	3			4				47			1		55
1998													
EC								27					27
Japan	1			2									2
Korea	1											1	2
Poland					1								1
United States					6								6
Total	2			2	6			27				1	38
1999													
EC								27					27
Japan	1			2									3
Poland												1	1
Total	1			2				27				1	31
2000													
Japan	1			3									4
Poland				1								2	3
Total	1			4								2	7
2001													
Czech Republic					4							1	5
Japan	2			3									5
Poland	1												1
Total	3			3	4							1	11

Cut-off date: 11 February 2002.

Source: WTO Secretariat (G/AG/NG/S/9/Rev.1).

countries between 1995 and 2001. The special safeguard was triggered where only minimal quantities of (non-tariff quota) imports were taking place. 138

Another special safeguard mechanism is the "transitional safeguard" provided under Article 6 of the Agreement on Textiles and Clothing, intended to protect Members against damaging surges in imports during the transition period for products not yet

that the rules leave Members a certain margin of manoeuvre with regard to the determination of the existence of dumping. So, if the presence of dumping can be shown, the conditions regarding the injury are less stringent than in the safeguard case. 140 Based on the requirement concerning the level of injury, it might be tempting to conclude that the prerequisites and the procedural requirements are much more stringent in the safeguards case. This difference however should not be overstated as some requirements are more stringent in the anti-dumping case than in the safeguards case. For example, the Anti-Dumping Agreement limits the right to apply for measures to the industry as a whole or to a group of producers whose collective output constitutes a major proportion of the relevant industry's total output (Article 4), and requires the presentation of evidence by the domestic industry to begin the process (Article 5), while the Safeguards Agreement does not include such requirements. Also, the scope of the domestic industry is narrower in the antidumping case where the domestic industry is defined as including only the producers of the like product, while in the safeguards case producers of directly competitive products are also included.

From an adjustment perspective, the main observation here is that anti-dumping has become the favoured route of domestic firms that wish to benefit from protection when foreign competition becomes more threatening. 141 Table VI.6 shows the evolution of the number of initiations of investigations over the period 1995-1999 as well as their distribution by reporting Member. It is likely that the anti-dumping procedure is sometimes used by firms seeking temporary relief for adjustment purposes. In other words, this would mean that provisions that are not designed specifically to facilitate adjustment are used instead of those designed for this purpose. This may be a problem if, as could be expected, disciplines imposed on anti-dumping measures are different from those imposed on safeguards and in particular if they are less adapted. For instance, the drafters of the Safeguards Agreement made the extension in time of safeguard measures conditional upon showing that adjustment is indeed taking place while anti-dumping duties can be maintained without firms having to show that they are adjusting. As a matter of fact, anti-dumping duties can be maintained as long as it can be shown that the expiry of the duty would be likely to lead to the continuation or recurrence of dumping and injury.

Under Article VI of GATT 1994 and the Subsidies and Countervailing Measures (SCM) Agreement, Members have the possibility to react to an injury or a threat of injury caused by subsidized imports to the domestic industry. If a Member determines the existence and the amount of the subsidy and proves that through the effects of the subsidy, the subsidized imports are causing injury, it may impose a countervailing duty that offsets the effect of the subsidy and removes the injury to the domestic industry.

Domestic firms, if they feel injured or threatened to be injured by imports can apply for the initiation of an anti-dumping, or a countervailing duty investigation, or they can apply for the initiation of a safeguards investigation. The decision to go one or the other route in principle depends on whether they estimate that the imports at stake are dumped, or subsidized, or simply increasing. In practice, domestic producers sometimes apply for both countervailing duties and anti-dumping measures.

The prerequisites and most of the elements of analysis and procedure are the same for countervailing duties as for antidumping measures. The provisions concerning the duration of countervailing duties are also the same as those that apply to anti-dumping.

There is an important difference however in the frequency with which the two instruments have been used. As the figures in Table VI.7 show, the countervailing duty procedure has been much less used than the anti-dumping procedure. Therefore the problems that could possibly arise because one instrument is used instead of another are much less important in the countervailing duty case than in the anti-dumping case.

#### 4. Balance-of-payment provisions

WTO rules also include provisions—GATT Articles XII and XVIII.B—that allow countries to safeguard their balance-of-payments in the face of a deterioration of their external financial position. Article XII allows additional (new) import restrictions to the extent necessary either to forestall an imminent threat of, or to stop, a serious decline in reserves or to rebuild reserves that are very low. Article XVIII.B allows developing countries to use import restrictions for the same purpose but under less stringent conditions. In particular, Article XVIII.B does not require the threat to be imminent nor the reserves to be very low but only inadequate. Both Articles provide that in these circumstances the general level of imports may be controlled through restrictions on either the quantity or value of imports.

The Understanding on the Balance-of-Payments Provisions of the GATT 1994 strengthened and clarified the balance-of-payments provisions. The objective was to avoid that restrictive measures be kept in place indefinitely. The Understanding for instance mandates the submission of a timetable for the phasing-out of import restrictions, subject to improvement in the balance-of-payments position. It also stipulates that a developing country, except for the least developed, may not consult under "simplified" procedures, as opposed to "full" (regular) consultations more than twice in succession. The Understanding strongly encourages the use of price-based instruments instead of quantitative restrictions and it requires countries applying quantitative restrictions to justify why they are not using price-based measures. The Understanding also confirms that restrictive import measures

As far as the requirement of causality between imports and injury is concerned, it is unclear whether it is more stringent in the safeguards or the anti-dumping case.
 The literature suggests that the institutional bias in the national procedures toward imposing anti-dumping tariffs has played a role. See for instance Markusen et al. (1995)

<sup>&</sup>lt;sup>142</sup> Simplified procedures introduced in the 1970s to relieve the burden on developing countries, in fact reduced the surveillance process by the Committee on Balance-of-Payments Restrictions to a routine; the IMF does not make a statement if there is a call for discussion or additional information, the next consultation needs to be "full" or regular procedures.

Table VI.6: Initiations of anti-dumping investigations by reporting Member, 1995-2001

Reporting country	1995	1996	1997	1998	1999	2000	2001	Total 1995-2001
United States	14	22	15	36	47	47	74	255
India	6	21	13	27				6

Table VI.8: Recourse to BOP provisions

Argentina 1972-1978   1986-1991   1996-1998   1996-1998   1996-1998   1996-1998   1997-1991   1997   1997   1995-1997   1961-1998   1961-1995   1961-1997   1961-1998   1961-1995   1961-1997   1961-1997   1961-1997   1961-1997   1961-1997   1961-1997   1961-1997   1961-1997   1961-1997   1961-1998   1961-1				
1986-1991   Bangladesh   1974   Brazil   1962-1971   1976-1991   1995   Bulgaria   1996-1998   Chile   1961-1980   Colombia   1981-1992   Czech Republic   1990-1991   1997   Egypt   1963-1995   Ghana   1959-1989   Hungary   1995-1997   India   1960-1979   India   1960-1979   Israël   1961-1998   Korea   1969-1989   Nigeria   1985-1998   Pakistan   1960   Philippines   1980-1995   Peru   1968-1991   Poland   1992-1996   Romania   1998-2000   Slovak Republic   1990-1991   1994-1996   1997-1998   1997-1998   1999-2000   South Africa   1960-1977   1985-1995   Tunisia   1967-1997   Tenangara   1960-1977   1985-1995   Tenangara   1960-1977		Article XVIII.B		BOP provision not specified
Brazil 1962-1971 1976-1991 1995  Bulgaria 1961-1980  Colombia 1981-1992  Czech Republic 1990-1991 1997  Egypt 1963-1995 Ghana 1959-1989  Hungary 1995-1997 India 1960-1979 Israël 1960-1979 Israël 1985-1998  Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1992-1996 Romania 1994-1996 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000  South Africa 1960-1998 Tunisia 1960-1998 Tunisia 1967-1997	Argentina			
1976-1991 1995  Bulgaria 1961-1980 Colombia 1981-1992 Czech Republic 1990-1991 1997  Egypt 1963-1995 Ghana 1959-1989 Hungary 1995-1997 India 1960-1979 Israël 1960-1979 Israël 1985-1998 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1992-1996 Romania 1994-1996 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1998 Tunisia 1960-1998 Tunisia 1967-1997	Bangladesh	1974		
Bulgaria 1996-1998 Chile 1961-1980 Colombia 1981-1992 Czech Republic 1990-1991 Egypt 1963-1995 Ghana 1959-1989 Hungary 1995-1997 India 1960-1997 Indonesia 1960-1979 Israël 1965-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 South Africa 1960-1998 Tunisia 1960-1998 Tunisia 1960-1998 Tunisia 1960-1998 Tunisia 1960-1997	Brazil	1962-1971		
Chile 1961-1980 Colombia 1981-1992 Czech Republic 1990-1991 Egypt 1963-1995 Ghana 1959-1989 Hungary 1995-1997 India 1960-1979 Israël 1960-1979 Israël 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1992-1996 Romania 1990-1991 Poland 1990-1991 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1998 Tunisia 1960-1997				
Colombia 1981-1992 Czech Republic 1990-1991 1997 Egypt 1963-1995 Ghana 1959-1989 Hungary 1995-1997 India 1960-1979 Israël 1960-1979 Israël 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1992-1996 Romania 1994-1996 South Africa 1960-1998 Tunisia 1960-1998 Tunisia 1960-1998	Bulgaria		1996-1998	
Czech Republic       1990-1991         Egypt       1963-1995         Ghana       1959-1989         Hungary       1995-1997         India       1960-1997         Indonesia       1960-1979         Israël       1961-1995         Korea       1969-1989         Nigeria       1985-1998         Pakistan       1960         Philippines       1980-1995         Peru       1968-1991         Poland       1998-2000         Slovak Republic       1990-1991         1994-1996       1997-1998         1997-1998       1999-2000         South Africa       1960-1977         Sri Lanka       1960-1998         Tunisia       1967-1997	Chile	1961-1980		
Egypt 1963-1995 Ghana 1959-1989 Hungary 1995-1997 India 1960-1997 Indonesia 1960-1979 Israël 1969-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1998 Tunisia 1960-1998 Tunisia 1967-1997	Colombia	1981-1992		
Egypt 1963-1995 Ghana 1959-1989 Hungary 1995-1997 India 1960-1979 Indonesia 1960-1979 Israël 1969-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1998 Tunisia 1960-1997	Czech Republic		1990-1991	
Ghana 1959-1989 Hungary 1995-1997 India 1960-1997 Indonesia 1960-1979 Israël 1961-1998 Korea 1969-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1998 Tunisia 1967-1997			1997	
Hungary India 1960-1997 Indonesia 1960-1979 Israël 1961-1998 Korea 1969-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1998-2000 Slovak Republic 1990-1991 India 1990-1995 India 1960-1998 India 1960-1968 India 1960-1998 India 1960-1968 India 1960-19	Egypt	1963-1995		
India 1960-1997 Indonesia 1960-1979 Israël 1969-1989 Korea 1969-1989 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1998 Tunisia 1960-1997	Ghana	1959-1989		
Indonesia 1960-1979 Israël 1969-1989 Korea 1969-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Tunisia 1967-1997	Hungary		1995-1997	
Israël Korea 1969-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1978 Tunisia 1967-1997	India	1960-1997		
Korea 1969-1989 Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Tunisia 1967-1997	Indonesia	1960-1979		
Nigeria 1985-1998 Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1978 Tunisia 1967-1997				1961-1995
Pakistan 1960 Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Tunisia 1967-1997				
Philippines 1980-1995 Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Tunisia 1967-1997	0			
Peru 1968-1991 Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Sri Lanka 1960-1998 Tunisia 1967-1997				
Poland 1992-1996 Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000  South Africa 1960-1977 1985-1995  Sri Lanka 1960-1998 Tunisia 1967-1997	• •			
Romania 1998-2000 Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Sri Lanka 1960-1998 Tunisia 1967-1997		1968-1991		
Slovak Republic 1990-1991 1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Sri Lanka 1960-1998 Tunisia 1967-1997				
1994-1996 1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Tunisia 1967-1997				
1997-1998 1999-2000 South Africa 1960-1977 1985-1995 Sri Lanka 1960-1998 Tunisia 1967-1997	Slovak Republic			
1999-2000  South Africa 1960-1977 1985-1995  Sri Lanka 1960-1998 Tunisia 1967-1997				
South Africa 1960-1977 1985-1995 Sri Lanka 1960-1998 Tunisia 1967-1997				
1985-1995 Sri Lanka 1960-1998 Tunisia 1967-1997			1999-2000	
Sri Lanka         1960-1998           Tunisia         1967-1997	South Africa			
Tunisia 1967-1997	0 1 1	10/0 1000		1985-1995
Turkey 1900-1997	Turkey	1960-1997		

NB: The dates may refer either to when the measures were notified or to the first consultation in the Committee.

The SCM Agreement distinguishes three categories of developing country Members: least-developed Members, Members listed in Annex VII(b) until their GNP per capita has reached 1000\$ per year, and other developing countries. LDCs and Annex VII(b) countries are exempted from the prohibition on export subsidies. Other developing countries have an eight year period to phase out their export subsidies, while countries in transition were given a seven-year period to phase out prohibited subsidies.

Agricultural subsidies are covered by special rules under the Agreement on Agriculture. Export subsidies which are consistent with the reduction commitments in the Agriculture Agreement

are not prohibited by the SCM Agreement, although they remain countervailable. Domestic supports consistent with the reduction commitments in the Agriculture Agreement are not actionable multilaterally, although they also may be subject to countervailing duties. Finally, domestic supports within the "green box" of the Agriculture Agreement are not actionable multilaterally nor are they subject to countervailing measures.

For the most part the rules in the SCM Agreement are very complex, making it difficult to generalize about which disciplines apply to broadly defined categories of subsidies. Article 2 states that the disciplines set out in the agreement only apply to *specific* subsidies, that is, to subsidies available to an enterprise, industry, group of enterprises, or group of industries. The presumption is that a subsidy that is widely available within an economy causes relatively little distortion in the allocation of resources and is therefore permissible.<sup>148</sup>

Parts II to IV of the Agreement originally defined three categories of subsidies—non-actionable subsidies, actionable subsidies and prohibited subsidies—and set out the rules that apply to each of them. Since the provisions concerning "non-actionable subsidies" applied only for a period of five years, beginning with the entry into force of the WTO Agreement in 1995, and since their application has not been extended, specific subsidies covered by the Agreement are now either actionable or prohibited.

Thus all subsidies that are targeted at particular companies, particular sectors or particular regions are either prohibited or actionable (however, the fact that they are actionable does not necessarily mean that they will or can be successfully challenged or countervailed by other Members). In contrast, adjustment-related government subsidies or benefits that are not specific are neither prohibited nor actionable.

#### Actionable subsidies

Since 1 January 2000, all specific subsidies covered by the SCM Agreement that are not prohibited are actionable. Subsidies in this category are subject to challenge, either through multilateral dispute settlement or through the imposition of countervailing duties, provided the complaining country can show that the subsidy has an adverse effect on its interests. Otherwise the subsidy is permitted. The Agreement distinguishes between three types of adverse effects that are actionable. One is material injury to a domestic industry caused by subsidized imports in the territory of the complaining Member. This is also the sole basis for countervailing action. Second, there can be a serious prejudice to exporters from the complaining country in the market of the subsidizing country or in a third country. The third arises when a subsidy undercuts improvements in market access expected to result from a reduction in a bound tariff (this would correspond to the nullification or impairment of benefits accruing under GATT 1994).

#### Prohibited subsidies

This category includes two types of subsidies: (1) export subsidies, and (2) local content subsidies. Export subsidies are those that are contingent, in law or in fact, whether wholly or as one of several conditions on export performance. A detailed illustrative list of export subsidies is annexed to the Agreement. Local content subsidies are those which are contingent, whether solely or as one of several other conditions, upon the use of domestic over imported goods. The two types of subsidies are prohibited because WTO Members have accepted that they are specifically designed to distort international trade.

These prohibitions are not new. Developed countries had already accepted the prohibition on export subsidies in the 1960s

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### VIII. Technical Annex

If moving from one sector to the other is cost less workers will move from sector A to B when trade is liberalised until wages are again equal in both sectors. This implies that the amount of people switching sectors in this case,  $T_{t}$ , satisfies:

f'(

sector B. If the economy would only exist for one additional period, like in Section A, and adjustment costs F would be required in order for adjustment to take place, the new equilibrium would be given by: $^{153}$ 

• 
$$f'(L_A - T_2) = g'(L - L_A + T_2) - F$$

Now let's assume instead that the worker lives for another two periods. This would imply that if he moves today, he would be able to take advantage from the higher wage during two periods. When the worker thinks about switching sectors, he will therefore also take his future wages into account in his decision.

## IX. Annex Section II

