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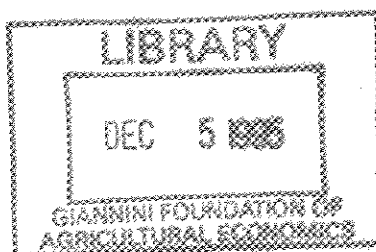
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THE DIRECTION AND TIMING OF AGRICULTURAL TRADE REFORM
IN CENTRAL AND EAST EUROPE

by

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The Direction and Timing of Agricultural Trade Reform
in Central and East Europe¹

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Introduction

Following a review of the recent history of Central and East European (CEE) agricultural trade policy, this paper considers arguments for future trade policy changes. There are few tenets as widely shared within the economics profession as the desirability of liberal trade, and CEE has made great progress in moving toward such a regime. For example, the EBRD scored CEE and Former Soviet Union (FSU) countries' progress in a number of reform areas, including trade/foreign exchange policy (Transitions, April 1995). All of the CEE countries (and few of the FSU countries) received the highest score in the latter category. If there is (near) unanimity for a policy prescription, which is moreover (substantially) adopted, the value of further discussion on the point may appear questionable. However, I have three reasons for thinking that CEE agricultural trade policy merits continued discussion and analysis. The first reason concerns the stability of liberal trade in general, the second concerns the special features of agricultural trade, and the third concerns the nature of the consensus, amongst economists, in favor of liberal trade.

First, it is not surprising that countries would make faster progress in trade reform than they would, for example, in large scale restructuring or banking reform. In the latter two areas, reform requires the creation of new institutions, new skills, and a different business culture. However, trade reform can be achieved with the stroke of a pen, by changing the position of decimal points in a tariff schedule. The chief impediments to liberal trade are political, whereas reform in many other areas requires a large amount of social infrastructure. The flexibility of trade policy creates dangers as well as opportunities, since a liberal regime can quickly be undermined. There are many historical examples of such reversals

Second, the agricultural sector really is different. The European Union (EU) places

more restrictions on CEE's agricultural exports than on most other commodities, and the CEE has increased barriers to agricultural imports. Agricultural trade amongst the CEE countries is also restricted, relative to other commodities, which suggests that CEE policy is not simply a response to EU restrictions.

Finally, the nature of economists' support for free trade is frequently misunderstood. The common view outside the profession is that economists have decided on theoretical grounds that free trade is a good thing, and that they base their policy recommendations on this theory. Protectionists will agree that liberal trade is fine in theory, but not in practice. However, economists are aware of a myriad of circumstances in which free trade may not be efficient; a tenure requirement for trade theorists is the propagation of at least one new explanation for the inefficiency of free trade. Most economists' support for free trade is informed by theoretical arguments, but is ultimately based on the practicability of alternatives (Krugman, 1993). Since advocacy for liberal trade does not rest on dogma or abstractions, but is a considered judgement, it should be continually challenged and tested. Economists should talk to policy-makers about the theoretical reasons why free trade is *not* optimal, as an aid to assessing the practical value of free trade.

In summary, I think that it is not evident that CEE has securely adopted a liberal trade regime, especially for agriculture (see, e.g., Winters 1994). Furthermore, it is not axiomatic that liberal trade is the right goal; even if it were, it is not obvious how quickly the goal should be approached. Consequently, continued analysis and comment on CEE agricultural trade policy is useful. This paper attempts to contribute to that discussion. Section I summarizes the recent history of CEE trade policy, and indicates the special treatment of

agriculture. Section 2 evaluates the argument that CEE agricultural trade restrictions are a proper response to Western policies. In section 3 I discuss the case for gradual liberalization because of adjustment costs. Section 4 considers political economy arguments for trade policies.

1. It's Too Soon to Tell¹

This section reviews recent developments in CEE trade reform², and then describes agricultural trade and trade policy. I close the section with some evidence of pressure to increase agricultural protection within CEE. The trade regimes of Hungary, Poland, Slovakia and the Czech Republic were similar by the end of 1991, although their history was different. For example, the reform process began earlier in Hungary, and occurred more abruptly in Poland. The main achievements (in trade reform) by 1992 were (i) de-monopolization of trade, (ii) significant substitution of quotas and licenses for market oriented instruments - tariffs and subsidies, and (iii) liberalization of exchange rate controls.

Within the space of about a year, the black market premium for currency fell from 50% to 17% in Hungary and 145% to 5% in Czechoslovakia; during that period the premium in Poland was approximately 0, having earlier been at 285%. In 1991 under the new foreign exchange regimes, domestic currency was made convertible for current account transactions. The Czech and the Polish governments are considering the introduction of full convertibility

¹ This was reputed to be Mao Tse Tung's answer when asked how he felt about the French Revolution.

² This material section draws on Rodrik (1995) and Drabek and Smith (1995).

by 1996.

Poland's big bang was associated with a major devaluation, which eliminated the currency premium, while Czechoslovakia and Hungary used a gradual devaluation. A devaluation is similar to an across-the-board tariff and export subsidy, since it promotes exports and taxes imports.³ For this reason, the devaluations have probably blunted protectionist pressure, and may partly explain why the initial rapid trade liberalization was politically feasible. Inflation, by increasing the real exchange rate, erodes this protection. Devaluations are probably useful accompaniments to trade liberalization, but they are not likely to sustain those reforms. As the real exchange rate appreciates, protectionary pressure is reasserted. Poland and Hungary used subsequent devaluations to maintain a low real rate, but by increasing the price of imports, this increased inflationary pressure.

Quotas in Poland and Czechoslovakia were nearly abolished, and licensing limited to only a few items (e.g. drugs, weapons alcoholic beverages). Hungary reduced the scope of licensing by more than 90% after January 1990. Though a consumer goods quota covered fifteen product groups, the size of the quota more than tripled in 1990. Western imposition of VERs on CEE is an important cause of the continued use of quantitative restrictions. The EC has imposed restrictions on agriculture, textiles, clothing and metallurgical products. The export of steel, textiles and clothing is also restricted by the US, Canada and Norway.

Tariffs continue as the main instrument of trade policy. In addition to customs clearance and other fees, the tariffs in Hungary averaged around 13% in 1991, and were considerably lower in Czechoslovakia (around 5%). Poland suspended tariffs on a wide range

³ With a devaluation, however, foreigners collect the implicit "tariff revenues".

of products during 1990 and early 1991, but in August 1991 raised the average tariff rate to 13.6%. Tariffs throughout the world were reduced in the Uruguay Round of the GATT negotiations. Percentage tariff reductions in CEE were substantially higher for agriculture than for industrial products. CEE's average agricultural tariff reductions were similar to percentage reductions in the West. Current aggregate tariff rates are at 3.8% for the Czech Republic and Slovakia, 6.9% for Hungary, and 9.9% for Poland. By this measure, at least, Poland has been overtaken as a leader of reform within CEE. Except for Poland, CEE aggregate tariff rates are in the mid-range of those of OECD countries. Drabek and Smith (1995) claim that this comparison understates the relative liberality of CEE nations, since they tend to rely less on non-tariff barriers (NTBs).

Between the mid 80's and 1993, government expenditures as a percent of GNP were roughly constant at 49% in Poland, declined from 66% to 60% in Hungary, and were reduced from 66% in Czechoslovakia to 47% in the Czech Republic and 55% in Slovakia. There was a more substantial decline in the percent spent on subsidies: from a range of 16% - 25% to a level in 1993 of 2.5% - 5% (Schaffer 1995). However, export subsidies are still used. Nearly 80% of the 1993 Hungarian agricultural budget was allocated to measures such as export subsidies, especially in livestock and meat products (AgraEurope 1993).

The first half of the 90's saw the collapse in intra-CMEA trade and the increase in trade with the West. In 1991 the value of CEE exports to the CMEA fell between 75% - 87%, and the value of their imports from CMEA fell between 50% - 75%. The volume of trade fell by a smaller amount, indicating a fall in the unit value of this trade. In the same period, trade with market economies grew substantially, in some cases more than enough to

offset the loss of intra-CMEA trade. Poland's total imports and exports both grew, and Hungary's imports grew while their exports were virtually unchanged. Czechoslovakia had a substantial fall in both aggregate imports and exports in 1990 and in 1991. The overall increase in CEE-West trade was accompanied by a growth in intra-industrial trade, which is characteristic of trade between developed countries. However, indices of "revealed comparative advantage" have changed little, and Drabek and Smith conclude that there has been little deep structural change in this trade.

The European Agreements determined the limits of CEE-EU trade. The Agreements identified a number of "sensitive commodities", including agricultural products, for which the EU restricts imports. In some cases, the quotas appear not to be binding, this is still consistent with the view that the Agreements significantly limit CEE agricultural exports.⁴ Drabek and Smith calculate that from 1988 to 1993 the share of "sensitive goods", *excluding agriculture*, in CEE exports to the EU increased from 24% to 30%. However, when agriculture is included, the share is roughly constant, implying that trade in CAP-related products has grown much more slowly than that of other sensitive products.

The treatment of agriculture in the Agreements is a reflection of EU, and not of CEE policy. However, agriculture has also been singled out for unfavorable treatment within the CEE. The Central European Free Trade Agreement (CEFTA) lists three categories of

⁴ A quota (or the threat of a quota) can inhibit trade even if it is not binding. The quota may make the start-up investment necessary to expand trade uneconomical, or exporters may "voluntarily" restrict exports in order not to trigger tighter restrictions. The level of trade in any period is random, and the moments of its distribution depend on decisions which are affected by trade policies. Thus, the observation that a quota is not binding in a particular year does not imply that the quota is unimportant

products, differing in the speed at which unrestricted trade is approached. Agriculture is in a class of its own, since although there is a planned eventual reduction of up to 50% in tariffs, quantitative restrictions will be maintained. The velvet divorce between Slovakia and the Czech Republic began as a customs union, but Slovakia later introduced NTBs and surcharges on Czech food exports.

Agriculture is an large sector in CEE, relative to the EU and other Western countries. According to AgraEurope (No 141, June 1994) agricultural employment accounted for between 12% (for Czechoslovakia) and 25% (for Poland) of total employment in 1992⁵, compared to the EU average of 6.3%. The agricultural share of GDP is between 7% and 14%, compared to a EU level of 3%. Agriculture is also significant in CEE trade. Its importance for imports has decreased somewhat, while the importance in exports has risen (Table 1). Indices of the value and volume also show that the level of imports fell over the late 80's, while the level of exports increased (Table 2). In both 1990 and 1992, Poland and Hungary had a positive balance of agricultural trade with the EU, but Czechoslovakia's small surplus turned to a deficit.

Current agricultural policies, both within the CEE and EU, are not stable. The CAP impedes the future integration of CEE into Europe. This integration would increase the EU

⁵ These percentages are substantially higher than the levels for 1990 reported in Karp and Stefanou (1994), using data from FAO tables. That data moreover showed that over the previous five years there had been a decline in the percent of employment in agriculture. It is possible, of course, that in the intervening two years the share of agricultural employment actually increased, but a more likely explanation rests with the vagaries of CEE data. The data on the share of agriculture in Polish GDP is also curious. FAO data puts this share at 14.7% for 1990, and the AgraEurope data shows the share at 8% in 1992. This would indicate a calamitous drop in Polish agriculture. Again, the explanation may be statistical anomaly.

agricultural production by at least 20%, and the Nallet/von Stolk Commission Report estimates that this would increase EU costs by 900 million ECUs per annum, given current policies. (AgraEurope, June 1994) Assuming a significant increase in production in the CEE accompanied with little change in consumption, Tangerman predicts that CEE will have a large net export surplus by 2000, whose 'CAP cost' would be at least 3.5 billion ECU (AgraEurope, June 1994). These estimates of the CAP cost of integration at least agree that it would be large.

There is a difference of opinion within the EU regarding appropriate policy reform. The Commission's think-tank, headed by Rene Steichen (a former French farm minister), believes that for a full and realistic integration of the CEE, CAP-style market regulation should be adopted there. Responding to this suggestion and to the European Agreements, the British House of Lords argued that the EU's concessions were inadequate, and blamed the CAP for protectionist sentiments in CEE. The OECD has also pointed out that the CEE countries are in an even worse position than the West to bear the budgetary and economic burdens implied by EU-style agricultural protection.

The view that a CAP-style agricultural policy would make it easier to join the EU has some currency in policy circles. "Hungary [has] ...announced plans to set up agricultural support systems which bear a striking resemblance to ...the Common Agricultural Policy.... Budapest has its eyes firmly fixed on EC membership.... The Hungarians take the view that the closer their policy resembles that of the Community, the easier it will be to adjust to the CAP when membership finally comes" (AgraEurope, 1993 No 126). Similarly, the Agricultural Policy Analysis Unit in Warsaw suggested that in the face of the country's weak

agricultural performance in the recent past, there should be large tariff increases (AgraEurope, March 1994). The President of the Hungarian Chamber of Commerce claimed that it was “intolerable to see foreign goods flooding the Hungarian market while domestic farmers were unable to sell their produce”. He recommended an increase in the import levies to “simplify farm policy and ensure an increased degree of protection for the domestic market” (AgraEurope, August 1994). The Czech farm minister Joeuf Lux claimed that government subsidies to agriculture should ensure that a greater proportion of domestic foodstuffs be sold to Czechoslovakian stores (AgraEurope, January 1994).

These calls for increased agricultural protection - especially from agricultural ministers - do not, of course, imply that such protection is about to be granted. However, together with the special treatment of agriculture in trade agreements⁶, and the importance of agriculture to CEE economies, they constitute evidence of the fragility of liberal agricultural trade policies within CEE.

2. Responding to Western Protection

Western policies are invoked as a justification for CEE protection. However, restrictive Western agricultural policies were in place during the initial reforms in CEE, and those policies have since become moderately less restrictive. This makes it questionable whether Western policies are directly responsible for increased pressure within CEE to restrict agricultural trade. Still, during the initial reforms CEE policymakers might have expected

⁶ The 1994 dispute over CEE beef exports illustrate the tension created by agricultural trade restrictions. While the EU insisted that this was a health measure, CEE regarded it as a blatant example of a NTB.

greater concessions from the West, and the subsequent disappointment could have fueled protectionist pressures. Certainly, Western restrictions harm CEE agriculture, and in that way aggravate protectionist sentiments. This does not imply that Western policies make it *rational* to adopt restrictive trade policies for CEE agriculture. People who have taken this position have two types of arguments. The first involves presumed changes in future Western policies, and the second involves CEE accession into the EU.

One possibility is that eventually the CAP will fundamentally change, and markets will be liberalized, offering an opportunity for CEE agriculture. In this case there might be an argument for supporting CEE agriculture during the interim period, in order to maintain the strength of the sector, and trade policies may be the only practical way of doing this. This argument has (at least) three flaws. First, the glacial pace of CAP reform gives CEE agriculture time to respond to changes in export opportunities. Second, even if one gives positive probability to a scenario of rapid CAP reform, the advocacy of government intervention requires that the government has a more reliable, as well as a more optimistic, assessment of that probability, compared to private investors. Third, even if it were wise to provide government support for agriculture, trade policy is almost certainly not the best instrument.

A superficially more compelling argument is that the CEE should use protectionist measures in order to achieve an approximate balance of agricultural trade as a means of paving their way into the EU (e.g., Monk, 1992). The basis for this view is that CEE would benefit from joining the EU, which would find it too costly to admit them if they were to

arrive as net agricultural exporters⁷. Since CEE governments cannot bear the fiscal burden of CAP-style payments, they should rely on trade measures. By restricting imports they would protect domestic producers without incurring budgetary outlays, and by restricting exports they would allay EU fears of an increase in CAP costs.

To the extent that CAP support increasingly takes the form of decoupled payments, e.g., income transfers, the financial cost (to the EU) of accession by CEE is diminished. CEE farmers are unlikely to be eligible for those transfers. It is true that if the CEE joined the EU as a net agricultural exporter, and if free entry of their goods decreased EU prices, this might require an increase in the level of income support, and thus an increase in CAP costs. Also, to the extent that the EU retains price supports as a means of protecting domestic producers, the arrival of exporters entitled to the same prices would greatly increase CAP costs.

These observations do not support the recommendation of using trade policies to achieve a zero balance of agricultural trade. The "accession argument" described above is either internally inconsistent or its implicit assumption is unreasonably pessimistic. The inconsistency arises because the two goals of protecting CEE agriculture and allaying EU fears of an aggravated CAP budget crisis are at odds with each other. If CEE agricultural policy really should be designed to smooth accession, the implication is that CEE should set out to destroy its agricultural sector - not an enticing policy prescription. Using trade policies to achieve a zero trade balance, for the purpose of wooing the EU, makes sense only if those

⁷ In 1990 and 1992 Hungary had a positive balance of agricultural trade with the EC of approximately \$800 million. The balance for Poland declined from \$700 million to \$165 million, and Czechoslovakian surplus of \$33 million declined to a deficit of \$125 million (UN Agricultural Review for Europe).

policies weaken CEE agriculture. However, that would require import subsidies and export taxes, the reverse of what is being proposed. The "accession argument" works against the types of policies for whose support it is being invoked.

It might seem that the argument could be salvaged by adopting the premise that after accession, agriculture will remain outside the agreement. This could be accomplished by employing something like "green exchange rates", which were used for many years to allow European Community members to insulate their respective agricultural sectors. (This was in the days when "green" had a different connotation.) However, if this actually happened, it would mean that it was possible to put aside agricultural considerations in negotiating accession. In that case, CEE-EU agricultural trade and accession would be separate issues, and there would be no point in designing current CEE agricultural policies with accession in mind. It thus seems that in order for the accession argument to make sense, one needs the stronger premise that not only will agriculture remain outside the agreement, but that in order for negotiations to be successful, it must appear that agriculture is not an important issue - because, after all, net agricultural trade is approximately zero. The imputation of this degree of hypocrisy to EU governments is what I meant by an "unreasonably pessimistic".

In addition to problems of internal inconsistency, an additional reason for objecting to the "accession argument" is that it assumes that the economic criteria for joining the Union will turn on sector-specific characteristics. If that premise is accepted, then CEE should tailor trade policy in order to mold a number of sectors, including at least those identified as "sensitive". Exactly how these sectors should be molded is not clear, but if the proposal for agriculture is taken as a model, apparently they should reflect the flaws of their EU

counterparts. This approach would admit all manner of protectionist claims, but would be unlikely to advance the goal of accession, and would certainly be costly in the interim. It seems more likely that macro-economic considerations will be more important than sector-specific characteristics in influencing the accession decision. That implies that policies should be judged on their economy-wide effects, and this supports a prescription for liberal trade policies.

Inter-Sectoral Adjustment and Policy Adjustment

There is a widespread view that policies should adjust slowly to account for the fact that factors of production adjust slowly. In its application to CEE agriculture, this view holds that the sudden liberalization of markets, and especially of trade, placed agriculture under unnecessary strain and resulted in avoidable costs. Thus, the goal of free trade should be approached slowly. This section discusses three aspects of the adjustment issue. First, I consider the likely magnitude of the adjustment required by liberalization; this material is based on Karp and Stefanou (1994). Second, I briefly review aspects of the theory on the relationship between adjustment costs and the speed of policy reform. Third, I consider the policy implication of adjustment costs using specific models studied in Karp and Paul (1994a, 1994b).

Change in the agricultural sector typically involves both the intra-sectoral reallocation of factors, e.g. the switch from livestock to crops, and the reallocation of factors between agriculture and other sectors. The second type of change is probably more important. If factors find alternative uses within agriculture following the decline of a particular activity,

protectionist pressure is blunted. Therefore I consider inter-sectoral change. I concentrate on the effects of reform on the adjustment of labor, probably the most important mobile factor for both political and economic reasons. The expected magnitude of this change determines whether the speed of reform is an important issue.

There are a number of ways that one can attempt to estimate whether reform is likely to have a large effect on agricultural labor. Reform in East Germany resulted in a large loss of agricultural jobs, but this evidence is hard to interpret. The statistics for agricultural employment included many jobs that we do not normally consider agricultural, and thus overstate the loss. Also, East German agriculture was handicapped by the adoption of an overvalued exchange rate, and the imposition of CAP-related quotas.

A number of simulation models were used to estimate the likely long-run change in agricultural output following liberalization. Many of these predicted moderate changes in aggregate output (although substantial intra-sectoral adjustment) and assumed large productivity gains. These results are consistent with a fall in agricultural employment, but do not suggest its magnitude.

Measures of pre-reform distortions provide another clue for probable employment changes. If those distortions were moderate, reform would lead to moderate price changes, and thus, we expect, moderate changes in employment. The USDA constructed PSE's of pre-reform CEE policies which appear somewhat smaller than Western levels during the same period. Although these numbers are only suggestive, they indicate that the pre-reform level of protection were not enormous. This conclusion is consistent with the view that Socialist agriculture was hugely distorted, since many of those distortions were self-cancelling, or

handicapped rather than supported agriculture.

A final piece of evidence involves the relation between income levels and the fraction of labor in agriculture. Karp and Stefanou (1994) estimated this using a sample of 64 non-socialist countries. The pre-reform share of agricultural labor in CEE was consistent with levels in non-socialist countries of similar income levels. This suggests that socialist policies did not lead to an inordinately large share (given income levels) of labor in agriculture, so we would not expect liberalization to lead to an exodus from agriculture. Of course, in view of the negative relationship between income levels and agricultural employment, we would expect the sector to decline as income increases. However, this is quite different than a decline in agricultural employment due to changes in relative prices caused by liberalization.

It is difficult to find strong empirical support for the belief that, in the absence of protection, the agricultural sector would suffer massive job losses. Data on the evolution of CEE agricultural labour share provides little support for the hypothesis that reform has been especially painful to the agricultural sector. (However, see note 5.)

The weight (admittedly slight) of this evidence casts doubt on the view that policy reform (as distinct from income growth) is a direct cause of large inter-sectoral adjustment involving agriculture. This conclusion may be incorrect, and even if it is right, it is still possible that the costs of adjustment are excessive. It is therefore worth asking what the appropriate policy response would be, if one accepts the premise that adjustment costs are important. Here, theory is useful. The idea that adjustment costs are somehow sufficient to warrant government intervention has a ring of plausibility, but is wrong. People reason that since there must be some association between the economy and economic policy, then if there

is an external shock to which the economy can adjust only slowly, it makes sense to adjust policy slowly. This implies, in our context, that if labor must leave agriculture as a result of an exogenous change in relative prices, and if it is efficient for this migration to occur slowly, then policy should change slowly. For example, trade restrictions might be phased out so that the price agents face changes slowly.

This reasoning is logically incorrect, and the following analogy exposes the fallacy. We can think of the reallocation of labor from one sector to another (or some other economic change) as analogous to the shipment of a ton of coal from one point to another. The more quickly the change is made, the more expensive it is; it costs more to transport coal by air-freight than by rail, and a sudden out-flux of labor is more expensive to society than gradual migration. However, the mere existence of "adjustment costs" in coal transport does not constitute a basis for a transport subsidy or tax, and neither does the adjustment cost of labor between sectors.

Proponents of gradual reform who invoke adjustment costs might accept this analogy, but then argue that it is incomplete. They would claim that it is not adjustment costs *per se*, but the association of these costs with some market failure, which gives rise to the need for government intervention. This position is defensible, but then in order to evaluate the adjustment cost argument for gradualism, it is necessary to specify (i) the type, or combination, of market failures, (ii) the menu of policy instruments available to the government, and (iii) the credibility of government announcements. I will consider these three general issues before discussing results from specific models.

Protectionists are often vague about the particular market failure(s), but clearer about

the symptoms: excessive unemployment or social strain caused by too-rapid economic change. Depending on the market failure, adjustment costs can be associated with change that is either too fast or too slow. In order to support the prescription for gradual reform, it is necessary to argue that a big bang would cause (or has already caused) excessively rapid change. Trade statistics may not be the best place to look for evidence of excessively rapid adjustment, because CEE trade is strongly affected by partners' policies. Other data, such as unemployment figures, opinion polls, and crime statistics, provide more evidence of rapid adjustment and social strain. There could be market failures which imply excessively rapid adjustment. Since we are unlikely to resolve this question empirically, theoretical analysis can provide useful insights.

Next, the merits of the adjustment cost argument for gradual policy reform depend on the available policy menu. The Principle of Targeting (discussed in the next section) suggests that trade policy is unlikely to be an appropriate tool to mitigate adjustment costs.⁸ Since trade policy is an important tool in practice, it makes sense to consider it. However, the main insights require only that protection involve a secondary distortion, i.e., a deadweight loss. With tariffs, this is the usual consumption and production cost caused by price distortions; if a wage subsidy were used there might be the deadweight costs associated with raising government revenue to pay the subsidies. In the absence of a secondary distortion, the policy

⁸ Trade policy (as with most commodity specific policies) affects relative prices, and thus impedes intra-sectoral as well as inter-sectoral adjustment. As I argued above, rapid intra-sectoral adjustment is likely to be desirable, at least partly because it weakens pressure for inter-sectoral adjustment. Karp and Stefanou (1994) discuss other disadvantages of commodity specific policies, and recommend support for the agricultural banking sector as an alternative.

could be used to move the adjustment process as close to the first best level as is feasible.

The distortion constitutes a cost of using the policy, against which the benefit of an improved adjustment path must be weighed. Since different policies are associated with different magnitudes of deadweight loss, the policy menu affects the desirability of trying to influence the adjustment process.

Finally, the credibility of a government's announcement of future policy may be crucial. A worker's decision about whether to try to move from one sector to another (e.g., to leave agriculture and look for a job in services or manufacturing) may depend on his expectations of the future wage differential and employment prospects. These variables depend on future government policy, so the migration decision can depend on workers' expectation of that policy. This forward looking behavior leads to the possibility of time inconsistency of optimal policy. Suppose that workers' decision do depend on their expectations of future government policy. In that case, the government has an incentive to announce today a tariff level for the future, with a eye partly to how that announcement will affect today's decision. However, when the "future arrives", "today's decisions" are already in the past, and the incentives have changed. For example, even in a world of perfect certainty, the considerations that determine the optimal level of the tariff in the year 2000 are quite different in the years 1995 and 2000; the considerations at 1995 include the effect of the announcement on migration decisions during the period 1995-2000, while those decisions are taken as given in the year 2000.

I will describe two models of inter-sectoral adjustment, and for each of these consider two possibilities regarding government commitment. In one extreme, the government is able

to commit credibly to all future policies (perfect credibility) and in the other to no future policies (zero credibility). Obviously the credibility of governments lies somewhere between these extremes. The resulting four possibilities illustrate the sensitivity of policy recommendations to the source of the distortion and the degree of commitment ability (Karp and Paul, 1994a, 1994b). Both models describe a sector which must shrink as a result of some external shock, and where migration is always gradual. Labor moves to a growing sector. We can think of the shrinking sector as agriculture, and the growing sector as the rest of the economy; in other examples the two sectors may be the state and private sectors. The market failures imply that under *laissez faire* adjustment is too rapid, so there is a presumption favoring protection. The form of protection is assumed to be a tariff. This makes the models particularly relevant for CEE transformation.

In both models $L(t)$ denotes the amount of labor in the non-agricultural sector and $\dot{L} \equiv dL/dt$ is the flow of migrants, i.e., the speed of adjustment. The variable $q(t)$ is the net present value of the difference in wages in the two sectors, i.e., the benefit of having a job in the non-agricultural sector. Workers are forward looking, so their decision whether to leave the agricultural sector at time t depends on the value of $q(t)$. The first model describes a general "pain-of-adjustment", and the second model describes the losses due to unemployment.

In the pain-of-adjustment model, the *social marginal cost* of adjustment is $\gamma(\dot{L})$, which is increasing in \dot{L} . We can think of this marginal cost as summarizing all of the costs associated with rapid adjustment, e.g. congestion, housing shortages, and social problems such as increased crime. More rapid adjustment increases the marginal social cost. The market

failure in this model is that agents bear only a fraction $\theta < 1$ of the social marginal costs. In the first-best equilibrium $\gamma(\dot{L}(t)) \equiv q(t)$, but without government intervention the migration decision is determined according to $\theta\gamma(\dot{L}(t)) = q(t)$. For given $q(t)$, adjustment occurs too rapidly.

If the government has perfect credibility, but is restricted to use a tariff, its optimal policy is to begin with a zero tariff, then increase it, and gradually reduce it. That is, the policy begins with a big bang, which is later eroded, and finally, the trajectory moves back to free trade. The explanation is as follows. The government is able to influence the migration decision only by influencing the variable q . Since it wants to slow migration, it needs to reduce the relative attraction of a job in the non-agricultural sector, and since the only instrument it has is a tariff, it needs to protect agriculture at some time. This explains why the tariff must be positive during part of the trajectory. In the long run, all adjustment has taken place, so the motivation for using the tariff vanishes. The tariff still creates distortions, so it is optimal to reduce it to zero eventually. The surprising part of the prediction is that the government *starts* with a zero tariff (the big bang). I repeat that a tariff at time t can influence the migration decision only by its effect on q . However, q is a forward looking variable; that is, it is determined by future tariffs. This means that the tariff at time t is capable of influencing only migration decisions that occurred *before* t . At the start of the program, time $t = 0$, there clearly are no previous decisions that can be influenced. A tariff at $t = 0$ would therefore have no beneficial effects on adjustment, but would still involve the usual deadweight loss. Consequently, it is optimal to begin with a zero tariff.

In this same model, if the government has zero credibility, the prediction is radically

changed. As explained in the previous paragraph, the only beneficial effect of the tariff at time t is on previous migration decisions. If the government is not able to make commitments, it cannot improve the current state of affairs by announcing a future tariff (since it does not control future tariffs). At each point the government takes past decisions as given, and since the current tariff - the only tariff over which the current government has control - can not affect either future or current migration decisions, the best that the government can do is to use a zero tariff in every period. That is, the government uses a big bang and adheres to it. Note that the government is not myopic or selfish, it simply lacks (by assumption) the ability to make commitments. The free trade policy is brought about not in spite of, but rather because of, the lack of commitment ability.

In the unemployment model, workers who leave the agricultural sector join a pool of unemployed workers, denoted $u(t)$. The probability that any worker from that pool will obtain a job in the expanding sector is $f(u(t))$, so the total number of workers who obtain jobs, and thus the increase in the workers in the expanding sector, is $\dot{L} = u(t)f(u(t))$. There is congestion in the labor market, which means that an increase in the number of unemployed workers decreases the probability that any single worker will obtain a job: $f'(u) < 0$. A worker has the choice of leaving the agricultural sector. This decision to migrate costs him $w(t)$, the wage in the agricultural sector, per unit of time, since he has to give up the agricultural job while looking for a job in the expanding sector. The benefit per unit of time is $f(u(t))q(t)$, the probability of getting a job times the benefit of having that job. The equilibrium amount of unemployment equates benefits with costs: $w(t) = f(u(t))q(t)$. Congestion is the source of the market failure. In making his/her migration decision, the

worker does not take into account the effect s/he has on other workers' chances of employment. Therefore there is excessive migration, from the standpoint of society, which manifests itself as an excessive amount of unemployment.

Just as in the previous model, the trajectory of future tariffs affects the current value of q . Here, however, the current tariff also affects the current cost of unemployment, by its effect on the current wage. Because of this, the current tariff is able to affect the current amount of unemployment, and thus the amount of adjustment. This second effect was lacking in the pain-of-adjustment model. The unemployment model does not yield simple analytic results, but by choosing specific functional forms we are able to simulate the equilibrium tariffs under perfect and zero commitment. We find that in both cases liberalization is gradual and monotonic, and moreover, that the tariff trajectories are very similar. Thus, we have an example of a situation where commitment ability is relatively unimportant.

Once again, the contrasting results of these models indicate that adjustment costs may or may not provide a rationale for gradualism, and that the answer may or may not depend on the amount of commitment ability that the government has. Two qualifications are important here. First, I think that the maintained hypothesis that the government's only policy instrument is a tariff, is suspect. Although there may be some cases where gradualism is warranted, I do not think they are likely in the arena of international trade.

Second, the assumption that workers are forward looking and have rational expectations, is open to criticism. This assumption is important to the results. Consider how matters change under two competing hypotheses, each of which can be viewed as an additional market failure: (i) workers think that future wages in the two sectors will always

equal current wages (myopic expectations); or (ii) workers use current and lagged wages to predict future wages (adaptive expectations). Under either of these two assumptions, workers cease to be forward-looking, and the commitment problem disappears, so there is no distinction between zero and perfect commitment.

With myopic expectations, the current tariff affects current migration decisions in both the pain-of-adjustment and the unemployment models. A gradual, monotonic liberalization is now optimal in both. Under adaptive expectations, however, the current decision is largely affected by previous wage differentials, which understate the advantage of leaving the agricultural sector. In this situation, the additional market failure (adaptive rather than rational expectations) cuts against the original market failure built into the two models. As a result, adjustment in the absence of government intervention can be too slow. In that case, the optimal policy prescription would be to tax rather than protect the agricultural sector. Clearly, the adjustment cost argument is a two-edged sword for those who advocate a gradual rather than a rapid liberalization of the agricultural sector.

Worse is Better?

The Principal of Targeting is the economist's answer to second-best arguments for protection. There are two broad categories of justifications for government intervention: either to achieve a "non-economic objective"⁹ such as a minimal level of sectoral output, or to correct a distortion, such as those considered in the previous section. The Principle of

⁹ Such objectives are called "non-economic" not because they are unrelated to the economy, or because they are somehow "uneconomical", but because the objective originates in the political or social arena, and is not explained by the pursuit of economic efficiency.

Targeting states that in these cases, policy instruments should be chosen which target the objective or the distortion *directly*. For example, if the government wants to ensure that agricultural production not fall below a certain minimum level, then the direct - and the appropriate - response is to subsidize production. If the country is an importer, it could also achieve this objective by means of a tariff. However, that would be an indirect, and inefficient, policy response. In the process of achieving the goal of increasing domestic production, it imposes a deadweight cost on consumers. The true cost to consumers exceeds the implicit subsidy received by producers.

Many distortions, and the impediments to many non-economic objectives, involve trade. In the previous example, it may appear that large imports "cause" the failure to achieve the desired level of domestic agricultural production, since imports replace domestic production. One might just as well argue that the cause lies with insufficiently patriotic consumers, or insufficiently productive producers. The point is that if the objective is to increase production, then the most direct way of doing that is to support producers, without altering consumer prices.

A standard rebuttal to this position is that it ignores a second important source of deadweight loss. A direct producer subsidy requires government expenditures, which requires levying a tax, which also involves a deadweight loss. ("Governments transfer resources in leaky buckets.") Therefore, although the logic of the Principle of Targeting is unassailable (because its conclusions follow from its assumptions), its application is problematic (because certain assumptions are false, or imperfectly true). Whether the producer subsidy or the tariff is more efficient, depends on whether the deadweight loss of the tax needed to finance the

producer subsidy exceeds the deadweight loss to consumers from the tariff. This is a good example of how theory is incapable of answering basic questions, and it illustrates the sense in which economists' advocacy of free trade is ultimately a judgement about practical matters, rather than a corollary of economic theorems. The preference for producer subsidies over tariffs¹⁰ is ultimately a judgement that the inefficiencies in the tax system involve smaller costs than those resulting from tariffs.

Modern political economy presents a more sophisticated (but probably a less important) challenge to the POT. I will refer to the general argument as Worse is (Maybe) Better, and explain its essential ingredients using the following analogy from industrial organization. Suppose that two firms are oligopolists. They do not cooperate, and therefore the market price is too low, and their sales quantities are too high, relative to the levels that maximize joint profits. If they were a cartel (i.e., cooperated), an increase in their costs of production would necessarily lower their profits. In a non-cooperative game, however, the cost increase may make them both better off. Each firm loses from its own cost increase, but that induces it to lower sales (raise price), and this benefits its rival. The benefit a firm obtains from its rival's higher cost may more than offset the loss it suffers from its own higher cost, so that joint profits increase. The key ingredients here are that the initial equilibrium is not optimal from the standpoint of the firms, i.e., it is a kind of second-best. Each firm inflicts a negative "externality" (here, pecuniary) on its rival, and the exogenous

¹⁰ This example does not constitute a recommendation for producer subsidies, unless the goal really is to maintain a given level of production. In most cases, a better description of policy objectives is the maintenance of producer incomes, or of rural populations. These goals are not identical to maintaining a given level of production, and they therefore call for policies different than producer subsidies.

change (here, a cost increase) reduces the externality. In this case, something that appears to make things worse, may in fact make them better.

Rodrik (1994) reviews a number of applications of this kind of story to international trade. I will only give the flavor of the arguments here (see Grossman and Helpman, 1994). Suppose that the government or (political parties) receives pressure for protection from different sectors of the economy. The pressure comes in the form of lobbying activities... Competition amongst the sectors (and possibly the political parties) determines the amount the different sectors spend on lobbying, and the amount of protection that is offered by the government (or promised by the parties). We are interested in a comparison of one equilibrium in which the government is restricted to using trade policies, and another in which it is restricted to using a less distortionary type of protection, such as a production subsidy.

If the economic model were a control problem, it would be clear that the less distortionary production subsidy results in a better equilibrium. However, since this is a game, from our industrial organization example we know that things are not so simple. The lobbying efforts by one sector impose a negative externality on other sectors.¹¹ Under the trade policy regime, protection is "more expensive" for the lobbies. This is because trade policy imposes greater costs on society, relative to the production subsidy, so there is more

¹¹ This is because the interests of the different sectors conflict. For example, an increase in protection for the agricultural sector is an implicit tax on manufacturing. An increase in agricultural lobbying lessens the efficacy of manufacturing lobbying, because politicians have to balance competing interests. In other words, if the funds for agricultural lobbying increase, the manufacturing lobby also has to increase its expenditures in order for its position not to be eroded.

political resistance to protection when trade policies are used; therefore, a greater amount of lobbying is needed to achieve a given degree of protection. This increase in the "price of protection" means that each sector tends to "buy" less of it. The fact that the agricultural sector, for example, is spending less on lobbying for protection, means that the manufacturing sector needs to lobby less simply in order to fend off agricultural interests. In a setting such as this, the equilibrium amount of protection that sectors receive may be the same under the tariff and the production subsidy regimes, but the equilibrium expenditure that they devote to lobbying may be lower in the former. In that case, all sectors are better off when policymakers are restricted to using the instrument which appears to be less efficient: worse is better.

These sorts of models force us to examine carefully our predilection for free trade, and more generally our support for the POT. Since every model throws into relief certain features of the real world and obscures others, none is capable of offering definitive answers. However, by describing possible situations simply (!?), or at least rigorously, models can clarify debate. For example, the model I described above illustrates that the naive application of the Principle of Targeting may be incorrect. It also invites us to ask whether, as a practical matter, we think it likely that tariffs will be better than production subsidies, for the reason given by the model. If our answer is "no", then the model sharpens and strengthens the POT.

I have emphasized that political economy models can challenge standard recommendations for policy regimes. I do not want to give the impression that this is a general feature of such models. Indeed, political economy models can provide additional

arguments that support liberal economic policies, as the following illustrates.

Matsuyama (1990) describes a situation where workers and managers agree to a wage at a first stage, and levels of employment are set at a second of a game. He considers two possibilities, one in which the level of employment is chosen to maximize industry surplus (the "efficient contract"), and the other in which employment is chosen to maximize industry profits (the "inefficient contract"). If the government is able to choose a subsidy between these two stages, it selects the subsidy to maximize social welfare. In doing this, it takes as given the wage, which has previously been set, and anticipates the effect of the subsidy on the equilibrium amount of employment.

When the government is able to choose a subsidy, both managers and workers prefer the (socially inefficient) profit maximizing employment contract. In the absence of government intervention, this contract would result in a suboptimal amount of employment, so the government chooses a positive subsidy to counteract this effect. At the wage-setting stage, the union is able to capture some of the rent from this (anticipated) subsidy. If management and the union were to agree to use the efficient contract, the amount of employment in the absence of government intervention is optimal, and therefore the government subsidy would be zero. In that case, there is no rent to be divided at the wage-setting stage. If, however, the government can commit to a zero subsidy before other decisions are taken, the union and management share the loss in surplus which results from adoption of the inefficient contract. In that case, they would prefer the efficient contract.

This model probably exaggerates the cynicism and shrewdness of unions and firms. However, it demonstrates how a protectionist culture gives managers and workers an interest

in establishing or perpetuating inefficiencies. This parable is especially relevant for economies in transition, which are in the process of establishing the ground-rules for government intervention.

Conclusion

I have attempted to establish two claims in this paper. The first is that, despite admirable progress, a liberal trade regime is not securely rooted in CEE, and that this is especially true for agricultural trade. The second claim is that although economists' support for liberal trade is informed by theory, it is not a corollary of economic theorems. Instead, it is based on the consideration of practical alternatives to free trade.

These points are worth making, especially at a forum such as this, because the debate over trade policy can easily be stifled. One way to kill the debate is to say that free trade has already been largely accomplished. The second way to end discussion is for proponents of either protectionism or free trade to decide that they have already heard all of the arguments. Economists know that there are many coherent arguments for trade protection. We may be of some help in deciding which of the arguments put forth for protection not only pass the test of logic, but also are of practical significance.

**TABLE 1: Share of Agriculture in Trade
(%)**

	1988	1989	1990	1991	1992	1993
<i>Imports</i>						
Poland	17.42	18.65	11.70	9.17	13.75	13.72
Hungary	13.40	12.90	12.33	9.22	8.64	8.74
Czechoslovakia	17.50	13.28	11.17	11.13	8.99	8.10
<i>Exports</i>						
Poland	12.15	14.91	14.35	15.00	18.5	15.12
Hungary	22.90	24.20	25.80	27.04	26.4	24.11
Czechoslovakia	7.61	7.11	9.40	11.12	7.41	7.70

Calculated from tables in FAO Trade Yearbook Vol. 47, 1993

**TABLE 2: Changes in Agricultural Trade of Selected CEE Countries
(Base: 1971-81=100)**

		1986	1987	1988	1989	1990	1991
<i>Imports</i>							
Hungary	Value	76	78	74	63	64	56
	Volume	95	127	92	91	112	80
Poland	Value	45	47	61	52	35	36
	Volume	41	55	58	64	28	17
Czechoslovakia	Value	90	93	109	84	66	50
	Volume	68	71	82	59	48	36
<i>Exports</i>							
Hungary	Value	87	88	99	101	108	110
	Volume	121	118	137	134	105	132
Poland	Value	113	127	143	174	189	153
	Volume	196	239	264	294	332	334
Czechoslovakia	Value	99	102	114	106	107	125
	Volume	107	94	93	98	111	138

Source: UN, ECE Agricultural Review for Europe No. 36, Vol I.

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