RESEARCH SEMINAR IN INTERNATIONAL ECONOMICS

School of Public Policy
The University of Michigan
Ann Arbor, Michigan 48109-1220

Discussion Paper No. 442

Economic Implications of Europe-Maghreb Trade Agreements

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July 17, 1999

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Paper presented at the conference,
"Algeria and Europe: Algerian/Maghrebi Voices Abroad
and European Reactions,"
May 14-15, 1999, Bologna, Italy

Revised
July 17, 1999

ABSTRACT

Economic Implications of Europe-Maghreb Trade Agreements

This paper reviews the various economic effects on Algeria of accepting the European Union's invitation to enter into an economic partnership, as has already been done by two other countries of the Maghreb, Morocco and Tunisia. These Euro-Mediterranean partnerships consist primarily of the formation of free trade areas, FTAs, including the EU and the country involved, so my analysis is devoted primarily to the economic effects of an FTA. However, the occasion of forming an FTA also provides an opportunity to undertake several additional steps toward integration, which I also examine. These are 1) deeper integration, 2) extension of the FTA to include other neighboring countries, and 3) reductions in tariffs on imports from the rest of the world. The paper concludes that an EU-Algeria FTA would probably be good for Algeria, but the benefits can be substantially enhanced and the costs reduced by pursuing also one or more of these additional steps.

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Keywords: Free Trade Area
Euro-Med Agreement

JEL Subject Codes:
F13 Commercial Policy
O19 International Linkages to Economic Development

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I. Introduction

What will be the economic effects on Algeria if it chooses to join with the European Union as part of its Euro-Mediterranean Partnership Initiative? The answer depends on what sort of agreement between the two potential partners is contemplated. At a minimum, it will include a free trade area (FTA), in which most tariffs and other barriers to trade are eliminated for trade between the two. The agreement could also, however, call for so-called "deeper integration," in which Algeria adapts many of its domestic policies and regulations to EU standards. And it could be accompanied in addition by "broader integration," in which Algeria negotiates an FTA also with its Maghreb and perhaps other Mediterranean neighbors. Finally, a partnership agreement could be accompanied by unilateral liberalization of Algeria's own trade barriers with respect to all countries outside any FTA. In this paper I will work through what one should expect to happen to the Algerian economy as a result of these initiatives.

I will first address, in section II, the effects of an EU-Algeria FTA alone, since that may be the most likely of the options. I will discuss what such an FTA will do to trade, both between the partners and externally, plus its effects on production and

* I have benefited from conversations with Matthew Connelly on the topic of this paper. I also received

employment, both in the aggregate and in sectors of the Algerian economy. These cannot be fully understood without first examining the effects of an FTA on such macroeconomic variables as the trade balance and the exchange rate, and I will consider those as well. Throughout, I will address the crucial question of what all this means for the welfare of the Algerian people. As will become clear, based only on the effects of trade that economists best understand (loosely called the "static effects") an EU-Algerian FTA may well lower the welfare of Algerians as a group in the short run, although there will certainly be many within that group who will gain. However, there are several less-well-understood effects of trade that suggest additional benefits from any trade liberalization, including an FTA, and these could easily swamp any adverse effects that are more easily measured. In the end, I favor cautious optimism about the net benefits of an EU-Algeria FTA, if that is the only liberalization that can be achieved.

In section III, however, I turn to the additional steps toward integration with foreign and world markets that I mentioned above and that could accompany an EU-Algeria FTA. These steps, if followed, would remove the need for caution, making for a package of reforms that could be almost certainly and substantially beneficial for the Algerian economy and its people.

The first additional step is deeper integration with the EU, which realistically must mean Algeria accommodating itself to procedures and policies of the EU, rather than the other way around. This could mean some loss of national identity or sovereignty for Algeria, but there are great benefits to be had as well, as I will describe.

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useful comments from participants in the Bologna conference.

The second additional step would be to negotiate a larger FTA that would include some or all of Algeria's neighboring countries. The economic benefits here are also very clear, although not as large, and political realities may stand in the way.

Finally, Algeria could engage in unilateral liberalization with respect to the world as a whole. This is the course of action that most international trade economists have long favored, and the arguments for it here are actually strengthened by the prospect of an FTA. Indeed, I find it very hard to see why a country in Algeria's position, once they accept any risks they may perceive from free trade with Europe, would be reluctant to open their borders, at least partially if not just as wide, to the rest of the world.

That, in effect, is my conclusion from the whole analysis, but I will expand on it in my concluding section IV. There I will try to rank, in an admittedly crude and only qualitative fashion, the various options that seem to confront Algeria as it contemplates further links with the European, the Mediterranean, and the world economies.

II. Effects of an EU-Algeria FTA

First, let us be clear on what an FTA does and does not entail. Members of an FTA reduce to zero most tariffs and other barriers to trade among themselves, while keeping unchanged their barriers to trade with countries outside the group. This is in contrast to a customs union, whose members also adopt on each product a common external tariff. The EU itself is a customs union.

This is about all that an FTA involves. It does not, by definition or even custom, involve any further integration of the markets of the participating countries, such as the free movement of capital, labor, or technology, or the harmonization of domestic policies

and regulations. Steps in these directions, if taken, go well beyond an FTA and beyond what is contemplated in the Euro-Med agreements.

There is however one more necessary element of an FTA that should be mentioned. The fact that members of an FTA have different tariffs against imports from outside, or "third," countries means that they must also adopt "rules of origin" to determine what goods are eligible to cross the FTA's internal borders free of tariff. Without such rules, goods could enter the FTA through the country with the lowest tariff, then cross into other countries circumventing the intent of the different tariffs. On the other hand, too strict a rule of origin would almost completely defeat the purpose of the FTA. A rule that required, say, that a good be 100% produced within the area in order to be traded freely, would permit virtually no tariff-free trade, since most goods involve at least a small fraction of imported inputs. Therefore, FTAs routinely specify rules of origin, sometimes different ones for different product categories. Simplest and most common is the requirement that a certain minimum percentage of a product's value have been produced within the FTA[1] in order to qualify for a zero tariff.

Setting that minimum percentage, however, is arbitrary, and sometimes other rules are used instead, usually for the purpose of benefiting a particular domestic industry. For example, in the North American Free Trade Agreement, NAFTA, the rule of origin in the textile industry was that goods must embody solely domestic content from the "yarn forward." This is an especially restrictive requirement. Rules of origin like this not only

[1] Even "within the FTA" is not as unambiguous as it sounds. If the EU forms separate FTAs with each of several Mediterranean countries, there is the question of whether a good that was produced in more than one of them will count as an FTA import into the EU. Such "cumulation" in the rules of origin is really a separate issue from whether the Mediterranean countries form FTAs among themselves, although the two

undermine the trade-liberalizing intent of an FTA; they can even cause greater distortions of trade than its absence.[2]

Even without trade-distorting rules of origin, however, FTAs inevitably do distort trade. For this reason, Jagdish Bhagwati, the leading economist spokesperson for trade liberalization of his generation, has argued against calling them "free" trade areas at all, prefering the term "preferential trade areas," or PTAs.[3] This term emphasizes that PTAs give a preference by members to other members, thus discriminating against nonmembers. This discrimination would not occur if countries simply reduced their tariffs against all trading partners, which is the concept of "free trade" that economists have been espousing for almost two centuries.

The discrimination that is inherent in an FTA is a problem, but not because of the harm that it does to others. A large FTA will in fact cause economic harm to third countries, but that harm will be negligible for a country as small as Algeria. The problem is instead that Algeria itself – the importing-country member of the FTA that provides the preference to its partner – is made economically worse off by discrimination, for reasons that I will explain below. Thus Bhagwati and most other economists object to the discriminatory aspect of FTAs not because it is impolite, unfair, or even harmful to others, nor because it is somehow immoral, as would be the case with other forms of discrimination. Rather discrimination causes economic harm to the country that does it, through what is called "trade diversion," and this is both wasteful and unnecessary. Both trade diversion and its costs will be explained in a moment.

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issues could be linked. Several who have commented on the Euro-Med Agreements, such as Tovias (1998), have stressed the importance of cumulation for insuring the benefit to Mediterranean countries.

[2] See Krishna and Krueger (1995).

First, though, I need to touch on several other aspects of FTAs. In its simplest and ideal form, an FTA requires zero tariffs on trade in all goods among members. This is required for approval under the rules of the World Trade Organization (WTO), although in practice hardly any FTAs have been submitted for approval to the WTO or to its predecessor, the GATT. The reason for requiring that all goods be covered is precisely the discriminatory nature of an FTA, to prevent the discrimination from being too selective in response to domestic interests in the partner countries.[4] In spite of this, however, there are usually some exceptions to the coverage of the FTA, and in the case of the Euro-Med agreements the obvious exception is agriculture.[5] The EU is not offering free access to its agricultural markets, since this would undermine its (very discriminatory and illiberal) common agricultural policy. Nor is it expecting free access to partner-country agricultural markets in return. For Algeria, this is not to my knowledge a major drawback, although it has been for some other participants in Euro-Med agreements.

Normally also, an FTA involves the reciprocal elimination of tariffs by both partners. As we will see, this can be important as an offset to the adverse effects of trade diversion, since the expansion of a country's exports into the partner country is unambiguously beneficial for it. In the case of the Euro-Med agreements, however, trade liberalization is not in fact reciprocal, only because the EU already unilaterally eliminated its tariffs in imports from these countries some years ago. One cannot of course fault the EU for having done that, but it does mean that if an EU-Algeria FTA is formed now, only Algeria will lower its tariffs. In effect, much of Algeria's potential benefit from an FTA

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[3] See Bhagwati and Panagariya (1996).
[4] See Schwartz and Sykes (1997)
[5] Services also tend to be excluded, as they were from the original GATT.

has already accrued, so that costs due to trade diversion now bulk larger in a prospective FTA's total effects.

I turn now to the effects that an FTA, under these circumstances, can be expected to have on various aspects of the Algerian economy.

Exchange Rate

With only Algeria reducing its tariffs, and only on imports from the EU, the most obvious and visible effect would seem to be that Algeria's imports from the EU will rise. This is true, and the increase is likely to be substantial, but it is unlikely to be the only effect on Algeria's trade. The reason is that, if it were the only effect, then Algeria's trade balance – exports minus imports – would decline by the amount of the increased imports, and so would the net demand for Algeria's currency, the Algerian dinar. Unless some other aspect of the FTA increases demand for the dinar at the same time – and for the moment I assume that this is not the case – then some sort of adjustment in the exchange market will have to occur. If Algeria attempts to peg its currency's value, as many developing countries do, then it will begin to lose international reserves. Macroeconomic policy may stem that flow, for a time, but both economic theory and the experiences of Mexico and other countries suggest that such a fix can be at best only temporary. Ultimately Algeria will have to let the value of the dinar fall, even if it tries to peg the currency in the short run. This depreciation of the dinar will happen sooner and

more smoothly, rather than later, if the Algerian central bank instead allows the currency to float.[6]

So either way, unless there is some other source of increased demand for the dinar, the FTA will cause it to depreciate. That is not bad. On the contrary, the depreciation will make Algeria's domestic goods cheaper compared to all foreign goods (not just those from the EU), and this will stimulate Algeria's exports and/or reduce the level of imports below what would have been attained with the tariff reductions alone. Thus, the depreciation will undo the worsening of the trade balance until equilibrium in the foreign exchange market is restored.

I will note below that an FTA may also have the effect of increasing foreign investment into Algeria, although even the direction of this effect is by no means certain if the agreement is no more than a bare-bones FTA. If that does happen, though, it will increase the demand for the dinar, and this may prevent it from needing to depreciate. The currency could even rise in value if the investment inflow is bigger than the trade outflow. If that happens, the trade balance will remain "worsened." But that too will be OK, since the increased trade deficit will be financed by the investment inflow.

The bottom line for the exchange rate, then, is that the dinar will in all likelihood depreciate, unless there is a substantial flow of foreign investment into Algeria as I will discuss below, perhaps attracted by deeper integration.

[6] Algeria reports to the IMF that its currency is currently subject to a "managed float." This could mean just about anything.

Trade Balances

As just noted, the overall trade balance of Algeria will worsen due to an FTA, but only temporarily and only if the exchange rate is pegged, unless the trade imbalance is financed by an investment inflow. Neither way is it a cause for concern, except as a signal that the exchange rate should be allowed to respond to market forces. If the trade balance remains negative and financed by foreign investment, this only means that Algeria is successfully financing its development with foreign funds, which is exactly as it should be.

There are other measures of trade imbalance that are likely to be noticed, however, and we should expect them. The tariff reductions of the FTA will stimulate imports only from the EU, while imports from other countries in fact will fall due to trade diversion. Since exports will expand across the board when the currency depreciates, and since there are no tariff reductions by the EU to pull exports disproportionately in that direction, we will see Algeria's trade balance "worsen" with respect to the EU and "improve" with respect to the rest of the world. True. Accept it. Economists have been teaching for generations that bilateral trade imbalances mean nothing and are certainly not a cause for concern. Admittedly, in this case the pattern is a byproduct of trade diversion that is indeed harmful, but the harm has nothing to do with the trade imbalances. The trade imbalances merely mean that Algeria is involved in a pattern of trade shaped like a triangle (or an even more-sided object). It simply exports to countries that export to the EU, and the EU in turn exports to Algeria. This could happen benignly even if there were no trade diversion at all.

Trade Patterns

Much more important than these trade balances, however, is the pattern of trade. In which industries does Algeria trade, and with whom? Is trade responding mostly to differences in actual costs, and so lowering the costs of goods used and consumed in Algeria? Or is it responding more to the artificial incentives of the FTA's discriminatory tariff structure and raising those costs? It is almost certainly doing both,[7] but the mix of these two – what economists since Viner (1950) have called "trade creation" and "trade diversion" – will determine whether Algeria gains or loses in real terms from the change in trade brought about by the FTA.

Trade diversion plays such a central role in the economic effects of an FTA that it is critical that it be understood. And it plays an even more important role in the Euro-Med agreements because of the fact that the EU's tariffs on the potential partner countries are already zero.

Trade diversion occurs when an FTA member switches its imports from nonmembers to members. In this case, suppose that Algeria has a 25% tariff on imports of, say, chips – either computer chips or potato chips, it doesn't matter.[8] Suppose also that, in spite of this, it imports chips from the U.S., not Europe, even though Europe does produce them. When the FTA eliminates the 25% tariff on chips from Europe, but not from the U.S., the European chips suddenly appear to have a 25% cost advantage relative to the U.S, and Algeria may switch its purchases to Europe. To the extent that occurs, it

[7] Hoekman (1998), in an excellent review of the issues that arise in the Euro-Med agreements, says that "trade diversion may occur." I respectfully disagree on this one point. I would say that it *must* occur. I cannot imagine any preferential trade agreement in the real world that would not cause at least a minimal amount of trade diversion.

is trade diversion. And note that any depreciation of the Algerian currency that will accompany the FTA does not interfere with this substitution. When the dinar falls, it raises the price of chips from all sources, maintaining the new 25% advantage of chips from Europe.

Why is this bad for Algeria? The underlying economic reason is that the tariff cut has induced Algerian consumers to buy more expensive goods from Europe instead of the cheaper goods from the U.S. We know that the European chips cost more, since they could not compete with U.S. chips when both were subject to the same 25% tariff.[9] The Algerian economy has therefore shifted to a higher cost source for its chips, even though the actual purchasers (consumers or firms) are buying what to them is the cheapest product.

That may seem rather abstract and immaterial, but the higher cost takes a very concrete form: lost tariff revenue. The entire amount that purchasers think they save by buying from Europe under the FTA was the amount of the tariff that they were paying before and that did not leave the country. Instead, the Algerian government was collecting that as tariff revenue. It was able to use that revenue, in turn, either to provide services to the Algerian public or to replace other taxes. When the FTA causes a country to lose tariff revenue on imports that would have come from outside the area, that is a loss to the country that will be felt quite directly as reduced government services and/or increased taxes in other forms.

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[8] As may already be abundantly clear, I know very few details about the actual Algerian economy, so my examples are entirely hypothetical.

[9] You might think, reasonably, that cost is not the only issue, and that quality or other product characteristics matter too. That is true for many products, and it complicates the argument, but it does not

In contrast, the opposite of trade diversion is trade creation. It is beneficial to the country as a whole, although not to everyone within it. Trade creation occurs when the FTA induces Algeria to import goods from Europe that it previously would have produced itself. Again, the economic argument is in terms of cost: Once the tariff against the EU is zero, Algeria will replace domestic production with imports only if the imports are truly cheaper. In this case, trade is expanding in response to true costs, or comparative advantage, and the traditional benefits of international trade apply.

As always with the gains from trade, there are losers as well – in this case the producers whose production has been displaced. But the lower cost of the imports means that those who buy them could afford to compensate those losers and themselves remain better off. It is in that sense that the country as a whole gains from trade creation.

One may wonder about the tariff revenue in this case as well, for it is true again that tariff revenue may be lost, though not of course on the expanded trade itself. Rather, to the extent that Algeria was importing from the EU even before the FTA, then tariffs on those imports were generating revenue, and that revenue is now lost to the government. However, in this case the loss to the government is a wind-fall gain to those Algerians who were and still are importing from the EU. So for the country as a whole, it is just a transfer, from government to importers, and it cancels out.

So far, what I have described could apply to any country and to any FTA. But there is one additional trade creation effect that one would normally find, yet cannot expect to get from an EU-Algeria FTA: an expansion of exports due to tariff reduction by the partner country. If the EU were reducing its tariff also against Algeria, then we

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undermine it at all. Essentially, one simply needs to think of the cost of attaining certain characteristics, or

would expect its imports from Algeria to increase. It does not matter for Algeria whether that increase in its exports to the EU is trade creation or trade diversion. Either way, the increase is necessarily beneficial for Algeria. In other words, when we come to balancing trade creation against trade diversion in assessing the total effect on Algeria, we should count as trade creation both the imports that replace domestic production and the exports that replace partner-country production. Of course, for Algeria and the EU, the latter will not occur because EU tariffs are already zero, and this source of benefit from an EU-Algeria FTA is therefore absent.

All this tells us that Algeria may either gain or lose from the trade effects of an FTA – the effects, that is, that work through trade on costs, via trade creation and diversion. We cannot say *a priori* how these two balance out, although the missing boost to exports suggests caution. It is really an empirical question, and for that we can look at several studies that were done for other North African countries motivated by their Euro-Med agreements. These agreements are too recent to have been studied retrospectively, but several studies exist that examined them prospectively. These are summarized in Table 1.

These studies were all done using computable general equilibrium (CGE) models.[10] The models have similar but not identical structures, and the particular scenarios chosen for analysis by the authors have also differed across studies because of

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the cost of utility itself, and the same argument then goes through.

[10] CGE models typically combine standard microeconomic assumptions with data from a single time period to simulate how an entire economy or group of economies responds to policy changes. Unlike macro-econometric models that are used for macroeconomic forecasting, CGE models have a weaker empirical foundation because their equations are not estimated econometrically from time series data. However CGE models are able to take into account much more complex general equilibrium interactions among a larger number of sectors and markets than can be accommodated in econometric models. This is often necessary

their different purposes. From the results summarized in Stern (1999), I have chosen those estimates that seem to come closest to capturing the effects of an FTA alone, although that was not always possible. Therefore, the changes in welfare that are reported in Table 1 seem to reflect primarily, if not exclusively, the interactions of trade creation and diversion within the models.

Most studies report a range of estimates, varying their assumptions about elasticities of response and/or mobility factors. These assumptions in turn correspond roughly to different time horizons of analysis, from short run to long run. One can therefore interpret the smaller of each range of estimates as being for the short run, and the larger for the long run.

As can be seen from the table, the estimates include a mix of positive and negative changes in welfare, the negative ones reflecting the finding of the CGE model that trade diversion dominates trade creation. This was found by Brown et al. (1997) for the short run for Tunisia, and by Dessus and Suwa-Eisenmann (1998) in a single estimate for Egypt. Other estimates for these two countries as well as one for Morocco, however, show welfare gains, so there has not been a consensus that trade diversion necessarily ever dominates. Even if it does dominate in the short run, also, the studies tend to suggest that as an economy is able to adjust more completely over time, trade creation will eventually come to dominate trade diversion, and countries will then benefit from the trade effects of an FTA.

These studies are of course for countries other than Algeria. They may be indicative of what will happen for Algeria, but only to the extent that Algeria shares those

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for the analysis of changes in trade policy, which typically include many and different changes in tariffs in

countries' relevant characteristics. There is one important characteristic that seems clearly to be unique to Algeria: its exports consist almost entirely of oil and natural gas, both controlled by the government and both presumably sold on the world market for a price in U.S. dollars that does not depend on the quantity that Algeria itself sells.

The importance of this is twofold. First, had it been the case that the EU had positive tariffs to reduce on imports from Algeria, these tariff reductions might have had only negligible effect on Algerian exports, whose exports of oil and gas would be unchanged. Only to the extent that substantial Algerian exports of manufactures had been prevented by EU tariffs would their removal be meaningful. This would require that Algerian manufacturing costs be uniformly just below those in the EU, so that a moderate tariff could shut them out. That does not seem likely. So the fact that EU tariffs are already zero probably does not do much to undermine the benefits of the FTA for Algeria. EU tariff cuts would not have helped much anyway.

Second, the exchange rate will also have only a negligible effect on exports. Presumably, the Algerian government responds directly to world U.S. dollar prices of oil and gas in deciding how much to produce and export, and it will not respond to a depreciation by expanding exports. Therefore, the depreciation of the exchange rate mentioned above as needed to correct the trade imbalance will be larger than would have been needed if exports could respond to a depreciation along with imports. Since the depreciation will therefore offset more of any tariff cuts than otherwise, this will limit the scope for trade creation and reduce the trade benefits of the FTA. Again, this conclusion would not hold if Algeria had a substantial amount of potential manufacturing exports

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different sectors of the economy simultaneously.

that were just below the margin of profitability. These could then be made competitive by a moderate depreciation. But with so little manufacturing exports of any kind to start with, that too does not seem likely.

To conclude this discussion of the trade effects of an FTA, there is good reason to be skeptical that these effects will be more than marginally positive for Algeria in the short run, and there is a good chance that they will instead be negative. Unless there are other positive effects that one has confidence in, either from the FTA itself or from other policies that might accompany it, it is not at all clear that an EU-Algeria FTA would be a good idea.

As we shall see, however, there are quite a number of such effects that one can hope for. Unfortunately, our knowledge of how well these other effects work and how to quantify them is much less well developed than our understanding of the trade effects.

Production and Employment

There are two questions that one might ask about how an EU-Algeria FTA will affect production and employment: Will the FTA increase or decrease Algeria's GDP and aggregate employment? And how will the distribution of output and employment across Algerian industries respond – that is, which industries will expand and which will contract? I will address both questions, in turn.

Aggregate Output and Employment

The main thing that we know about the determination of aggregate output and employment is that these are macroeconomic variables that are largely, with one

important exception, unaffected by trade policies. First, in the short run, the level of economic activity depends primarily on aggregate demand. One component of aggregate demand is the trade balance, but with a flexible exchange rate the trade balance is just a reflection of aggregate saving and investment, not trade policy. Second, in the long run, output and employment are determined by the economy's capacity to produce, together with the fraction of that capacity that it can employ consistently with price stability. This too is not known to be affected by trade policy, although recent experience suggests a possible link that I will note below. Thus we do not necessarily expect the transition to an FTA to disrupt the macro-economy.

The one exception arises with a pegged exchange rate, if that rate is not adjusted in response to the tariff reductions implemented by the FTA. As mentioned above, if the exchange rate does not depreciate, then tariff reductions are likely to cause a trade deficit, increasing imports without any corresponding increase in exports. Since net exports constitute one component of aggregate demand, this will mean a fall in aggregate demand, and it may precipitate a recession. However, it is also possible that the central bank's defense of the exchange rate will break down first, since capital markets, seeing the inevitability of a depreciation, will hasten its arrival through speculative capital flows. In that case, again, the effects of the FTA through trade on aggregate demand will be neutralized, leaving aggregate output and employment unaffected.

Turning to the long run, here we know that output and employment are determined not by aggregate demand at all, but by the "natural rate of unemployment," which reflects the dynamics, frictions, and institutions of the labor market. Frankly, the natural rate is not very well understood, and recent events in the macroeconomic situation

of the United States have made us question even what little we thought we knew. Therefore it would be presumptuous to state with any certainty that an FTA cannot affect this natural rate. Nonetheless, there is no such linkage that is commonly accepted as valid.

Recent experience in the U.S. has suggested however that the natural rate may perhaps be influenced by the degree of international competition. The natural rate is defined as that rate of unemployment at which the aggregate price level rises only as rapidly as people expect it to. Since actual unemployment in the U.S. has now (in 1999) fallen well below what we used to think was the natural rate, without any resulting increase in inflation, some have speculated that the natural rate itself has decreased. Some have also pointed to increased international competition as a possible reason for that decline, arguing that this competition is preventing firms from raising prices in spite of tight labor markets. If that is correct, then one could argue that an FTA, by exposing domestic Algerian producers to increased competition from European producers, will also cause a fall in long-run equilibrium unemployment in Algeria. If so, this would add correspondingly to long-run output as well. That is a nice story, but we are a long way away from knowing that it is correct.

Sectoral Output and Employment

However aggregate output and employment respond, there are bound to be larger changes at the sectoral level. In most countries, one would expect the following changes in sectoral output and employment to occur in response to any reasonably broad form of trade liberalization:

1. Import-competing sectors tend to contract, especially those whose tariffs fall the most.

2. Export sectors tend to expand, especially those with the greatest cost advantage.

3. Non-traded sectors, including services, contract on average, although particular sectors that provide inputs to expanding export sectors expand.

The identities of these sectors can be inferred fairly well from data on trade and tariffs, although there will always be exceptions of sectors whose own response depends more on their links to other domestic industries than on their trade orientation. To take all available information into account requires a CGE model of the country in question.

As an example that may be suggestive, Table 2 reports the percentage output and employment changes calculated by Brown et al. (1997) in a prospective analysis of an EU-Tunisia FTA. As can be seen, the projected output changes are nontrivial, the largest being in the range of ten to twenty percent. The employment changes are even larger. The sectors that expand the most for Tunisia are several labor-intensive manufactures, such as leather products and footwear, plus mining and quarrying which is a strong export sector. The sectors that contract the most are rubber products and several other manufactures. It should be noted that the employment changes average to zero by assumption, not good fortune, since this microeconomic CGE model assumes that labor markets work perfectly to maintain a fixed level of total employment.

Just how indicative the list above and these numbers for Tunisia will be for Algeria, however, is open to question. As already noted, Algeria really does not have any meaningful export sectors, except oil and gas. When tariffs come down with respect to the EU, we would expect the most protected sectors to contract and the least protected to expand, with some of the latter perhaps turning into meaningful exporters. But aside

from this pattern, which is bound to miss a lot of detail, I do not see any way to predict the fates of individual sectors without a fully fleshed out CGE model of Algeria.[11] If such models exist, I have not seen them.

Foreign Direct Investment

An important motive behind some FTAs, especially for participation by developing countries like Algeria, is the hope that they will attract significant foreign direct investment, FDI. Unfortunately, it is not at all clear that a simple FTA will accomplish this. On the contrary, there are at least two opposing forces acting on FDI when tariffs come down in an FTA, and it is the negative force that seems more likely to dominate in the Euro-Med context.

The hope, of course, is that investment will be attracted to a country like Algeria, both by the desire to serve its now more thriving market and by the intent of using its cheap labor to export to the larger market of the FTA. The former may happen, but it depends on the other effects of the FTA being significantly beneficial, so that there is a thriving market to serve. If FDI is also being sought as the primary mechanism for raising incomes and market size, then this may not work. As for attracting export-oriented FDI, this is even more questionable in the case of the Euro-Med agreements. With tariffs already zero into the EU, this motive for FDI should already have been present without the FTA, and the FTA does not particularly enhance it.

[11] Nor do I mean to imply that even CGE models are particularly accurate. The complexity of an economic system far exceeds both available data and our understanding of how to use it. The results of CGE models should be taken to be, at best, only suggestive.

Instead, the main change brought by an EU-Algeria FTA is elimination Algeria's own tariffs on imports from the EU. These tariffs themselves may already have been the motive for some of the FDI already in place in Algeria, as European firms previously sought to "jump" the tariff by producing within the Algerian market where they wanted to sell. When the tariffs fall, this motive disappears, and the danger is that previous investors will pack their bags and leave.

Thus it is easy to reach a very discouraging conclusion regarding the likelihood of stimulating a new net inflow of foreign investment with an FTA. This is overstating the downside, however. In fact, like most developing countries, Algeria does have a large pool of cheap labor, much of it currently unemployed. International firms do not hesitate to employ such labor so long as they can be sure that other conditions for successful production will be met. One of these is the reliable and cheap availability of the other inputs that they need, in addition to labor. All of these are unlikely to be available from within Algeria, and with the current levels of protection, they are costly and inconvenient to import. With the FTA, many of them will become available from the EU, and this alone may be enough to stimulate significant export-oriented FDI.

Therefore, I conclude this subsection with considerable ambiguity as to whether an EU-Algeria FTA will induce significant net FDI or not. Nor in this case do I really know where to look to find a more reliable answer. The economic theories of international investment are not, in my opinion, very helpful for predicting quantitatively how it will respond to policy changes. The best that a country can do is to make its economy as hospitable as possible to foreign investors, and then hope for the best.

Reducing tariffs is an important step in this direction. Other steps that may be more important will be discussed below.

Growth

What a developing country like Algeria really wants to do, presumably, is to grow. Therefore the most fundamental question about an FTA is whether it will foster economic growth. Even if an FTA causes efficiency losses due to trade diversion, or short-run losses for other reasons, these losses can be more than made up for if the FTA raises the long-run rate of growth by even a percentage point or two. A steady higher rate of growth of output will eventually create gains that surpass most other losses one might imagine.

On this issue, economists are rather like peddlers of herbal remedies. We have lots of reasons to think that freer trade, even freer trade within a discriminatory FTA, will stimulate growth, and we have anecdotes to back them up. But there is precious little scientific evidence that any of them actually work. Our best evidence, really, is the large number of satisfied customers – countries that have opened their markets and grown successfully – even though nobody knows exactly why the open markets have helped.

Let me just list some of the reasons why we think that, *maybe*, an FTA could be beneficial to growth:

1. By raising the level of real income, the FTA permits greater savings and investment, promoting long-run growth.[12]

[12] This is the basis of Baldwin's (1992) argument to explain much of the success of the EU. This argument may or may not explain a permanent increase in the rate of growth, depending on the type of growth model in which it is used. With traditional neoclassical growth, increased saving only leads to a larger steady-state

2. By giving access to cheaper capital goods imports, the FTA can make savings and investment more effective in expanding the capital stock, promoting long-run growth.[13]

3. The FTA permits, through trade, the spillover of technology from more advanced to less advanced countries, as entrepreneurs in the latter are able to learn from and imitate the former by observing the products they produce.[14]

4. To the extent that the FTA attracts greater FDI, it contributes directly to the expansion of the (foreign-owned) capital stock. FDI may also cause greater spillovers of technology than would be possible with just arms-length trade.

This is a fairly impressive list of reasons for an FTA to stimulate growth. Even if we are not fully confident of any one of them, we may still hope that together they will contribute to a positive outcome.

Against these reasons, however, should also be mentioned the reasons why an earlier generation of development economists were doubtful that trade would have a positive effect on growth. These included the following:

1. Trade causes poor countries to specialize in dead-end industries where growth is not possible, industries that lack either static or dynamic economies of scale or whose technologies are not advancing.

2. Trade causes many poor countries to specialize in primary products, which in addition to the disadvantages just mentioned, are also subject to volatile and/or declining world prices.

Based on these and other reasons, many developing countries in the 1950s and 60s were advised to pursue "import substitution" as a growth strategy. They avoided trade and sought to direct their economic activities toward sectors where they perceived, from the examples of the developed countries, that the prospects for growth were best. The performance of these countries was disappointing, however, as documented in Bhagwati

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level of per capita income, not to a permanently higher rate of growth. Such can be obtained in some of the more recent models of endogenous growth. See Long and Wong (1996).

[13] This is the argument of Mazumdar (1994), among others. This too raises the long run growth rate only in endogenous growth models.

(1978) and Krueger (1983). Their growth was surpassed eventually by an increasing number of countries that pursued a more export-oriented development strategy.

This does not tell us, then, why trade seems to be good for growth, and it certainly does not tell us that trade in all forms is necessarily good for growth. The countries whose growth seems to have benefited most clearly from trade – Hong Kong, Taiwan, South Korea, Singapore – made no use at all of FTAs, for example. Nonetheless, their examples, and others since, do provide suggestive evidence that freer trade through an FTA, if it is not too distortionary in other respects, might well increase a country's rate of growth.

III. Additional Steps Toward Integration

So far I have confined my attention to what may be the most likely outcome, a simple FTA in which Algeria's tariffs on imports from the EU are eliminated and nothing much else is done. The message I hope to have conveyed is that such an FTA would probably be a good idea for Algeria (and of negligible importance for anyone else), but that there are costs as well as benefits from such a simple, discriminatory trade arrangement so that the net benefit is by no means certain. The additional steps toward integration that I will consider in this section have no such ambiguity. All of them add to the economic benefits, not the costs, and therefore if they were to accompany an EU-Algeria FTA they would tilt the balance more in its favor.

[14] Evidence of this effect, for trade generally, not just FTAs, was provided by Coe and Helpman (1995).

Deeper Integration

The term "deep integration" refers to the coordination and harmonization across countries of policies and regulations other than the tariffs and formal nontariff barriers that are usually the subject of an FTA. These include other policies at the border, such as certification that imports satisfy domestic standards of safety and health. They also include other seemingly pure domestic policies, such as regulations of banking and insurance, where inconsistencies across countries can complicate and interfere with international transactions. It was the removal of such discrepancies that constituted much of the EU's move toward the "single market" that was completed in 1992.

There is nothing in the EU's invitation for Euro-Mediterranean partnerships that requires such deep integration, and as far as I know, very little of it has accompanied the FTAs of Morocco and Tunisia. Nonetheless, there is no reason why Algeria could not pursue such initiatives itself, and if it did, the advantages of an FTA would be much greater.

The case for deeper integration has been made well by Hoekman and Konan (1999) in exactly the context of Euro-Mediterranean free trade, so I will not say too much about it here. Suffice it to say that by coordinating standards, regulations, and procedures on the EU model, Algeria will make it significantly easier for both Algerian and foreign firms to operate in both markets. This will help not only the firms that engage in trade *per se*, but will also help to modernize and make more efficient the Algerian domestic industries that provide services to firms that produce and trade. Algeria's banking sector, for example, has been noted by Rhein (1998) to be a stumbling block for industrial and economic development, and deeper integration could change this.

However, there is another even more important reason why deeper integration is desirable. Many developing countries have great difficulty achieving the ideal and therefore the benefits of competitive markets and other economic freedoms. This is not just because they are small, although that is often a factor. The problem is that they have a legacy of government intervention in the economy that undermines freedom and competition, a legacy that may remain from colonial eras or even from the misguided advice of an earlier generation of development advisors. Once in place, these government interventions create incentives to retain and expand them, as they generate substantial income flows for well positioned beneficiaries in both government and the private sector. Further, without much of a functioning market economy, those who could profit from more productive enterprises either do not exist, or they lack the resources to push for change. As a result, the existing dysfunctional system is locked into place.

In principle, the solution to this has nothing to do with trade or with integrating the economy with foreign markets. One simply needs to change the system. But the vested interests that sustain that system also naturally resist such change, often very effectively. Therefore a commitment by the country to adopt the procedures and institutions of a more healthy market economy such as the EU can be a massive force for very desirable domestic institutional change. Of course that commitment itself will be resisted by the same vested interests that thrive in the current system, but the other advantages of an EU partnership may provide the extra inducement to make it happen.[15]

[15] Closely related, and nicely described by Sparrow (1998), are the problems posed for developing countries by bureaucracy and corruption. Here too, a partnership agreement that includes deep integration would help.

Expansion of the FTA to Neighbors

Throughout the world, developing countries tend to trade less with each other than with more developed countries, even when the developing countries are close neighbors. This is not that surprising, given that neighbors may have comparative advantage in the same sorts of primary products favored by their climate or location, and that developing countries as a group have comparative advantage in the same labor-intensive goods such as textiles and apparel. Both types of products, too, are rather standardized and therefore not subject to the intra-industry trade of differentiated products that often characterizes trade among developed countries. The developing countries, then, simply do not have a great deal to sell to one another. This is as true of the countries of North Africa as it is of developing countries elsewhere.

Because of this, there has been some tendency for developing countries to enter into free trade relationships with developed countries without extending those relationships to their developing country neighbors. The result is what has been called a "hub and spoke" pattern of trade relationships, in which trade flows freely along the spokes connecting the developing countries to the EU hub, but not among the developing countries along the rim.

For trade by the original firms of the developing countries, this may not matter much, since they do not indeed have much to sell each other. But this pattern is very damaging in another respect. Developed country firms that may contemplate establishing a presence along the rim are discouraged from doing so by their inability to trade along it. For example, if a European multinational wants to sell to the markets in both Morocco and Tunisia, it may have the choices of producing at high cost in the EU and then

exporting freely to both (since both now have FTAs with the EU), of producing at low cost in both and not trading at all, and of producing at perhaps even lower cost (due to scale economies) in one of the countries and exporting to the other. Depending on the sizes of the markets and on the extent of scale economies, the third alternative may well offer the lowest cost, if trade is free between them, but the first may dominate if trade is not free. In that case, by retaining their tariffs against each other, Morocco and Tunisia are depriving themselves of FDI.

A final point to make is that tariffs among neighbors may be the easiest to evade through smuggling.[16] When that occurs, it reduces the distortionary impact of the smuggling itself and may actually be beneficial to the economies.[17] However, as an illegal activity, smuggling also undermines the institutional structures of a country and the credibility of its government. Also, because of its extra cost to avoid capture, smuggling can never achieve the full benefits of free trade. Therefore, it is especially desirable that neighboring countries reduce or eliminate their trade barriers wherever possible. Extending an EU-Algeria FTA to include free trade with other countries that have these agreements is the obvious and simplest way to do that.

Lower Tariffs on Imports from Outside the FTA

The final additional step toward integration that I will consider is for Algeria to unilaterally reduce most of its tariffs on imports from the world as a whole. This of course is something that trade economists like myself have been advocating for almost

[16] My thanks to Matthew Connelly for pointing out the relevance of this for Algeria.
[17] This has long been a familiar point among economists. Wolf Stolper and I elaborated it in Deardorff and Stolper (1990).

two centuries for all countries, and the case for doing so here is as strong as ever. But it is made even stronger if Algeria enters into an FTA with the EU. The principal danger of a discriminatory trade arrangement like an FTA, as has been explained above, is trade diversion. This danger would simply not exist if Algeria were to reduce all tariffs to zero against all imports, not just those from the EU. That is not likely to happen, of course. But to the extent that Algeria can identify those products for which trade diversion is likely, cutting tariffs on their imports from the world enough to keep them competitive with imports from the EU will prevent trade diversion without doing any harm to domestic industry. Identifying these products may be a bit tricky and certainly cannot be done perfectly. But some attempt to do this would be richly rewarded.

Naturally, I would also advocate going further than that. Like most economists, I am convinced that Algeria could benefit greatly from a major unilateral trade liberalization, whether or not it also enters into an FTA with the EU. The payoff to unilateral liberalization has been demonstrated many times by many countries in the last two decades, even though the experience has not always been without some disruption. Entering fully into world markets, not just those of an FTA, not only enhances economic efficiency, it also makes a country an attractive place in which to invest and provides a competitive environment that undermines and prevents all sorts of distorting and corrupt behavior. The case for free or freer trade with the world should certainly not be forgotten just because a partnership with Europe has been offered.

IV. Conclusion

My conclusions have been evident in the above discussion, but I will repeat them here.

First, if the only options for Algeria are to enter an EU-Algeria FTA or not, without any of the additional steps that I have identified, then it is a close and rather uncertain call whether Algeria should do it or not, on economic grounds. The costs and benefits both are clear but many are hard to quantify, and we cannot be certain that the benefits exceed the costs. In the words of Hoekman and Konan (1999, p. 26), FTAs "that are limited to the elimination of tariffs for merchandise trade flows are of limited value at best." Nonetheless, the list of possible benefits is long enough that I am inclined to favor the FTA.

It would be much better, however, if Algeria could manage any or all of the additional steps toward integration that I have discussed. The most important, but also probably the hardest to accomplish both economically and politically, is deeper integration. Deep integration not only facilitates trade, it also facilitates an economically competitive environment that will substantially enhance the performance of most if not all Algerian industries. However, it also requires substantial changes in the ways that Algerians go about their business, and it is bound to be resisted as undermining their way of life. Much of that resistance is economically motivated and short-sighted. The gains from using deep integration to move toward a more competitive and efficient economy can be enormous and are surely worth the costs.

Next in importance, but this time theoretically easy to accomplish, should be partial tariff reductions on imports from the world. If these can be calibrated primarily to

eliminate trade diversion, they involve no cost at all to anyone in Algeria, and they provide substantial benefits. They will not remake the economy, as deep integration could do, but they can almost guarantee that the FTA itself will be economically beneficial.

Last on my list would be extending the FTA to include neighbors. This too is worth doing, but the economic payoff is small, in my view. It would be a shame if political roadblocks to this step were to interfere with any of the others.

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Table 1
Prospective Estimates of Welfare Effects of FTAs with the EU

	% Change in Welfare Short-run → Long-run
Morrocco	
Rutherford, Rutström, and Tarr (1993)[a]	+1.20 → +2.28
Tunisia	
Rutherford, Rutström, and Tarr (1995)[b]	+0.50 → +1.56
Brown, Deardorff, and Stern (1997)[c]	–0.2 → +3.3
Egypt	
Konan and Maskus (1997)[d]	+1.9
Dessus and Suwa-Eisenmann (1998)[e]	–0.18

Source: Stern (1999)
[a]Free trade agreement with the EU, including increased export prices for citrus fruits and vegetables. Estimates reflect a range of elasticities of supply in resource sectors.
[b]Elimination of tariffs on all imports from EU. Estimates for short-run and long-run.
[c]Free trade with EU. Estimates for sector-specific and sectorally mobile capital.
[d]FTA with the EU.
[e]Reduction of import tariffs on EU manufactures.

Table 2
Sectoral Changes in Output and Employment in Tunisia Estimated to Result from Tunisia-EU Free Trade

Sector	Output % Change	Employment % Change
1 Agriculture	0.0	-0.9
310 Food	-1.4	-4.6
321 Textiles	6.3	-5.4
322 Clothing	3.7	6.5
323 Leather Products	18.2	9.4
324 Footwear	13.7	11.0
331 Wood Products	12.5	7.9
332 Furniture, Fixtures	-7.6	-12.8
341 Paper Products	-6.1	-16.0
342 Printing, Publishing	-2.2	-6.0
35A Chemicals	-3.5	-4.8
35B Petroleum Products	1.7	2.1
355 Rubber Products	-15.2	-20.2
36A Nonmetal Min. Prod.	-6.8	-8.0
362 Glass Products	-0.4	-1.9
371 Iron, Steel	-5.1	-8.5
372 Nonferrous Metals	4.7	5.0
381 Metal Products	-5.2	-9.3
382 Nonelec. Machinery	-2.2	-5.4
383 Electrical Machinery	4.0	-1.0
384 Transport Equipment	-6.1	-8.5
38A Misc. Mfrs.	13.5	11.6
2 Mining, Quarrying	13.5	20.0
4 Utilities	1.8	2.4
5 Construction	-0.5	-4.1
6 Wholesale Trade	1.3	14.1
7 Transportation	5.5	12.1
8 Financial Services	2.8	7.5
9 Personal Services	-2.0	-3.5
Total	0.7	0.0

Source: Brown et al. (1997)