

**Foreign Direct Investment in Tunisia in the Context
of the Free Trade Agreement with
the European Union**

Mohamed Abdelbasset Chemingui

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Abstract

The aim of this study is to determine whether Tunisia could expect an increase in Foreign Direct Investment (FDI) flows in response to the establishment of a Free Trade Area with the European Union (EU). While the necessary conditions to stimulate the flow of FDI have received considerable attention on behalf of economists in recent years, the relationship between trade policy and FDI has not been the subject of in-depth studies. It is theoretically well established that the effect of regional integration on FDI flows is ambiguous. The partnership agreement between Tunisia and the EU has the potential of playing a catalytic role in increasing the openness of the Tunisian economy and attracting FDI. Empirical analysis shows that the investment potential created by the partnership agreement as well as the growth of FDI inflows to Tunisia are conditioned by the existence of important capital productivity. Even if liberalization is extended to agricultural products and services, Tunisia couldn't expect important welfare gains if there is an absence of vital increase of capital productivity.

الاستثمارات الأجنبية المباشرة في تونس في ضوء اتفاقية التجارة الحرة مع الاتحاد الأوروبي

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ملخص

تستهدف هذه الدراسة تحديد ما إذا كانت تونس تتوقع زيادة في تدفق الاستثمارات الخارجية المباشرة إليها نتيجة لتأسيس منطقة التجارة الحرة مع الاتحاد الأوروبي. وبينما لاقت الشروط الضرورية المحفزة للاستثمارات الأجنبية المباشرة اهتماما ملحوظا من قبل الاقتصاديين في السنوات الأخيرة، إلا أن العلاقة بين السياسة التجارية وبين الاستثمارات الأجنبية المباشرة، لم تكن موضوعا للدراسات المعمقة. فمن الناحية النظرية، فإن أثر التكامل الاقليمي على تدفق الاستثمارات الخارجية يبدو غامضا. إن اتفاقية الشراكة بين تونس والاتحاد الأوروبي يمكن أن تلعب دورا محفزا لزيادة الانفتاح التونسي وبالتالي جذب الاستثمارات الأجنبية المباشرة. تشير التحليلات الامبريقية إلى إمكانية إيجاد استثمارات من خلال إتفاقات الشراكة، كذلك الأمر فإن زيادة تدفقات الاستثمارات الأجنبية المباشرة مرهونة بوجود إنتاجية كبيرة لرأس المال. وحتى لو امتدت عملية التحرير لتشمل المنتجات الزراعية والخدمات فإنه من غير المتوقع أن تحقق تونس مكاسب هامة في ظل غياب زيادة جوهرية في إنتاجية رأس المال.

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Introduction

The European integration which was set up in the 1950s offers, so far, the best example of economic association among industrialized countries. A great number of regional integration agreements (RIAs) have been concluded since that time between developed and developing countries. Between 1947 and 1994, the GATT secretariat has officially registered a total number of 108 RIAs (Al-Khalidi, 1998). This number represents nearly 90% of the total number of countries belonging to the World Trade Organisation. These agreements encompass five continents. The list includes the North American Free Trade Association (NAFTA), the Asian Free Trade Area (AFTA), and continues on to include the West African Economical and Monetary Union Area. The emergence of continental Free Trade Areas (FTA) in the rich part of the globe has been a phenomenon of world economy since the end of the 1980s, so that "Continental Regionalism" according to Kébadjian (1995) has become a real constraint on the trade policy of small countries with liberal economies who find themselves compelled to choose the most advantageous bloc to join. As Mahjoub (1996) has underlined, it is impossible for developing countries to remain outside the three great trade blocs, i.e. North America, Europe and South Asia, unless they accept to remain outside the international flow of goods and capital which is necessary to the prosperity of their economies.

Three types of regional agreements may be considered. The first type concerns the North-North model of integration which assembles together developed or industrialized countries, such as the European Union (EU) for instance. The second type concerns the North-South pattern of arrangements and groups countries of different levels of development. The NAFTA which links Canada, the United States and Mexico, illustrates this sort type of agreement. The third type consists of a South-South mode of economic integration between developing countries such as the Common Market of the South (MERCOSUR), which constitutes an FTA among some of the developing countries of Latin America.

Although some RIAs have been stirred up by political considerations, it is nevertheless obvious that economic considerations have been the main motivation. Indeed, countries enter RIAs or FTAs because integration is often considered as bearing many economic benefits. According to Blostrom and Kokko (1997), regional integration brings, in the short term, a growth of inter-regional trade and investment. In the long run, the establishment of a larger regional market permits keen competitiveness and ultimately, a more appropriate allocation of resources, and offers to signatory countries positive and varied externalities which will allow them to achieve higher economic growth rates. Moreover, a developing country's experience in this particular field is convincing as the success of the "Four Asian Dragons" market-economy policy illustrates. Indeed, this liberal policy has convinced all the countries of the south and, as correctly noted by Burniaux and Waelbroek (1995), it is not easy to find a developing country today which still counts on a skilful planning of import substitution.

The establishment of an FTA between Tunisia and the EU by year 2010 poses some challenges as well as it offering some opportunities. In addition to the difficult task of measuring the expected effects stemming from the creation of an FTA among countries with unequal development levels, the specificity of trade relations between Tunisia and the EU requires a more in-depth and innovative analysis. Indeed, while apart from a few exceptions, the European Market is totally open to Tunisian industrial products; the Tunisian Market is

strongly protected against the entrance of European products. The main reason for the establishment of an FTA with the EU is, according to some, the hope to attract Foreign Direct Investment (FDI).

The key issue is to define what role FDI could play in the economic development process of a country like Tunisia, and how this FDI could contribute to recouping the adjustment costs of the Tunisian economy in a context of trade liberalization. The aim of this study is to determine whether Tunisia could expect an increase in FDI flows in response to the establishment of an FTA with the EU. While the necessary conditions to stimulate the flow of FDI have received considerable attention on behalf of economists in recent years, the relationship between trade policy and FDI has not been the subject of in-depth analysis.

Trade Policy and FDI: A Theoretical Analysis

Developing Countries Motivations to Integrate Regional Free-Trade Areas

As underlined by Lawrence (1996), the reasons which led to the recent integration agreements, differ radically with those which were at the concept of regionalism which appeared in the middle of the 20th century. As a matter of fact, and contrary to the agreements of the 1930s, 1950s and 1960s, those concluded recently, aim at providing their members a better participation to world economy. The recent commitments of developing countries in FTAs indicate that they adopt the opening of their economy as a strategy to promote their exportation and draw FDI rather than substitute their importation with their too much protected and often non-profitable local production. Through regional integration, less developed countries in particular, wish to become more attractive for the exporting enterprises of their commercial partner countries.

Basing foreign exporting firms in developing countries is beneficial for many reasons: (a) creates jobs; (b) transfers technology and know-how; (c) improves the equilibrium rate of the payment balance; and (d) develops downstream and upstream activities.

For more developed countries, the creation of an FTA with less developed countries has been always motivated by the desire to improve the competition of certain activities by taking advantage of the low level of wages and fiscal exemptions as well as other attractive measures. The establishment of NAFTA for example, has been mainly motivated by the big American companies which consider that the constitution of this FTA with Mexico, will eventually lead to the amelioration of the international competitiveness of their production. This is especially for those firms which regime needs a large level of manpower for their production. Such a redeployment of activities could not take place if tariffs and non-tariffs barriers affect the capital flows and finished product trade. It clearly appears that recent RIAs are often motivated and defended by big business, in most cases, multinationals, as these appear to be the main beneficiaries.

Recent RIAs may be considered as a common answer of the concluding member states to the new situation created by the intensification of international competition. This is at a time when access to new markets becomes more and more important to secure the success of companies and economies which can no longer limit their activities to their local markets. The rapid expansion of technical progress imposes to companies to cover rapidly their fixed costs related to innovation before other competitors get the new technology. The increasingly

tense correlation in foreign investment and exportation on one hand, and services on the other hand, is another reason which has incited developing countries to integrate regional FTAs. In order to convince the biggest number of foreign exporting enterprises to base themselves in developing countries, the development of services has become a vital condition. The higher growth rate registered in recent years in international trade of services in comparison with that of products, shows the crucial importance of service sector in global value of FDI as well as in attraction of firms exporting foreign products. Indeed, a favorable environment for exporting foreign companies requires the existence of other competitive firms, which provide the necessary inputs and services for production of goods and services. A great part of FDI in service activities seems necessary to accelerate the growth level of FDI in the agricultural as well as in the industrial sector.

Developing countries endeavor to attract foreign investors who in their turn, will promote the transfer of technology and enhance local producing activities and development programs oriented towards the promotion of exportation. Within the structural adjustment program which aims, among others goals, at reducing the state participation in the production activities of goods and services, foreign investors are critically needed as they bring with them capital technology and know-how. The contribution of foreign investors is sometimes considered to be the only means to accomplish privatization program of large public enterprises very often confronted with the difficulty to find a national buyer.

This brief analysis helps to understand the reasons which developing countries have to integrate in FTAs with developed countries, especially with their traditional trade partners. These reasons may be summed up as follows: (a) preoccupation to attract and facilitate international investments and (b) major entry of international firms to promote trade and growth in the whole local economy. Other developing countries feel the need to constitute FTAs with other blocs of developed countries to get advantage of an additional demand and thus, stimulate their productive capacities. In fact, the consumers of developed countries have a much higher purchasing power than those of developing countries. This is why they constitute an attractive market for enterprises operating in developing countries when the local market cannot absorb all the production. The development schema which most developing countries have tended to adopt more increasingly, aims at increasing the demand to increase the production and thus, reduce unemployment, improve the well being of families, and reduce the deficits of the public budget and the commercial balance.

The Dynamic Impact of Regional Integration

Beyond the static effects of RIAs, above all the effects of trade creation and diversion, these agreements are also likely to provoke dynamic effects – a key of success of these RIAs. Among the factors at the origin of dynamic effects, Blomstrom and Kokko (1997) have quoted: (a) A better technological expansion and the non-exploited scale economies in a local market stimulated by the lowering of prices, allow to face international competition and obtain gain in well being; (b) A strengthened competition leads to a better productive efficiency and a better allocation of resources; and (c) A more favorable climate for investment following the low cost of equipment goods and intermediary consumption products and elimination of institutional obstacles which prevent the access of foreign firms to the local markets.

The first desired dynamic effect expected at the conclusion of RIAs is to increase FDI flows. These could be beneficial in many ways. Foreign firms bring capital by taking shares

in privatization, technology and their knowledge of the markets. As has been the case for Mexico, the perspective of foreign private capital flows plays a very important role in the decision of developing countries to open their trade to the North as well as representing a necessary condition of success of the liberal policy (Berthelemy and Girardin, 1993).

The transfer of technology connected with the international trade, represents another dynamic aspect of RIAs. These transfers of technology may follow various channels: (a) Imported inputs increase the quality of the finished products and cover a certain know-how; (b) Direct investment are bearers of new technologies, and last but not least; (c) The promotion of export goes necessarily through an improvement of quality (Dessus and Suwa-Eisenmann, 2000). To understand the impact of a RIAs on the attraction of the FDI, it is important to understand the relationship which exists or which may exist between trade liberalization and FDI flows.

Trade Policy and FDI Inflows

For most economists, the empirical studies on the relationship between FDI and trade do not aim at establishing a relation of cause and effects between these two factors.⁽²⁾ They try to answer a much more modest target, which consists in finding out whether the growth of one is systematically associated to a growth or a diminution of the other. More simply, it is an endeavor to know if trade and FDI are substitutable reciprocally (if there exists a negative correlation between them) or complementary (if there exists a positive correlation between them).

If emphasis is placed on the reciprocal links, the question of knowing whether FDI and trade are replaceable or complementary, becomes secondary. In the first or second case, their reciprocal links are very strong. If they are strongly connected, this means that the trade policy has an impact on the flow of FDI and that policies related to FDI have an impact on the volume of trade. For this reason, it is advisable that the two sets of policy are treated in an integrated manner. As the objective of this study is to examine what could be the impact of a reform of the trade policy of a country on the volume of FDI, it seems also opportune to identify how the opening up of trade could affect the level or the degree of attraction of FDI by a given economy.

Trade policies may have an influence on the FDI promotion in various ways. Very high duties may be at the origin of an FDI aimed at avoiding them to serve the local market. Other kinds of obstacles to import may also have the same impact. FDI may serve to ward off a protection threat. Thus, these investments are motivated by the idea that the additional cost linked to the production on the foreign market is more than compensated by the fact that there are less risks to be subject to new import obstacles for the existing exports towards this market.

Although some receiving countries intentionally resort to high duties to attract investments, the advantages stemming from this policy seem to be limited. The FDI attracted by protected markets generally takes the form of independent production units oriented towards the local market and which are not competitive in the export field. Indeed, the high

⁽²⁾ An example is to determine if the flow of inputs of FDI brings along an increase of exportation or if on the contrary, the development of exportation is translated into an increase of FDI.

levied duties on raw materials and imported intermediate products, may reduce the competitiveness on the international scale. This is especially true if the local inputs are expensive and poor in terms of quality (as it seems to be the case following the decision to protect national producers from these products). To circumvent the negative effects, receiving countries often establish regimes of duties discount for the export-oriented foreign inputs. This is one of the key elements of the encouraging measures offered to foreign investors, particularly in the export industry.

A weak level of protection to investment - particularly if it is strengthened - could be much more attractive to the export-oriented FDI than the regimes of duties discount. A comparison of the FDI flows going to the relatively opened Asian markets to those present in the relatively protected Latin American Markets, shows that Asian countries tend to attract export-oriented FDI while Latin American countries generally attract FDI which are oriented towards the local market (UNCTAD, 1996).

It has been demonstrated that receiving countries that work to be integrated more fully in the world economy, establish weak level duties which have to be consolidated to make the tariff regime more credible. As the decisions concerning investment are, by their own nature, oriented towards the long term, investors are sure to be influenced by the uncertainties surrounding the duration of the regimes of duties discount and other incitement programs, for these can be changed or removed by the authorities at anytime.

The size of the market is an important element in the decision of a multinational company to invest. By removing internal obstacles to trade, an FTA or a tariff union provides to companies the opportunity to sell their products in an integrated market from one or many production sites, and consequently to profit from the scale economies. This could have a clear incidence on the investment flows, at least during the period when companies restructure their production activities.

The most recent theoretical and empirical analysis on the FDI tends to study trade and the movement of capital, as substitutive modes to foreign market service. This point of view on the relationship between trade and the mobility of production units, confirms the perspective according to which tariff barriers and other restrictions to imports, encourage the FDI in the fields of substitution to imports. This means that the generalized reduction of tariffs entails a reduction and even a repatriation of FDI to their original country or to countries that are still protected.

The FDI could be discouraged by the tariffs reduction in a receiving country since the companies' export costs in their original country, will relatively decrease. This results from the tariff breaking up in relation to the establishment and production costs of the subsidiary companies in the receiving country.

The same relationship could exist between export and non-tariff barriers as these require from companies the establishment of subsidiary firms abroad, or to grant licenses to local producers for them to sell their products in the foreign market. The RIAs, which may reduce or even remove the tariff and non-tariff barriers, could make export easier and more profitable in financial terms, and consequently, discourage the FDI. This type of analysis implies that the external environment of a domestic market remains constant.

As the reduction of the tariff and non-tariff barriers are the main characteristics of RIAs, it doesn't seem clear that the predictions of models will be more reliable considering the global level, instead of the regional level of trade liberalization. The reason is that local and foreign investment in a given country, could be affected in many ways by regional integration. When looking at the inter-regional FDI flows in the perspective of an establishment of an FTA, a decrease of the FDI flows may be expected as trade liberalization makes exportation from the original country relatively more attractive than FDI. However, there will obviously be a need to change the structures of the regional production, and consequently, more flows of investments going from a member country to another. In this way, the inter-regional FDI should increase in some member countries in response to the emergence of these new investment opportunities, while they are going to decrease in some other member countries, following the absence of redeployment of firms.

The size of investments made by a company abroad depends on the relative power it holds in different countries that are members of the agreement. The FDI flows tend to be relatively limited if the companies which are the most able to profit from the new situation, have already evolved in the most favoured production sectors. This potential impact on the inter-regional FDI flows is better known under the name of "Investment Diversion" (Kindleberger, 1966).

As far as inter-regional FDI flows are concerned, analyzes suggest that there are many reasons to expect a growth of these flows. FDI flows coming from countries that are not members of the agreement, could increase if the protection level tightens in response to the RIAs. Flows of foreign capital could also increase if initially limited by the size limit of each single market. In this way and contrary to national markets, the common integrated market would be as large as to take over the fixed costs of the establishment of new foreign subsidiary companies. Fixed costs are often seen as barriers to the entrance of new firms. Kindleberger (1966) has given the name of "Investment Creation" to this type of investment as a response to the effect of trade diversion analyzed by economists as a result of regional integration.

It is possible to envisage a situation where regional integration may provoke a reduction of FDI coming in usually from non-member countries. In a more specific manner, if the initial stock of FDI of non-member countries is organized in horizontal branches in most of the countries of the region, it is not certain that such structures may remain optimal after the establishment of the FTA. A possible answer to regional integration could take the shape of a rationalization of the branches established in member countries so that the whole integrated region may be provided by a small number of branches located in a small number of member countries where economic conditions are thought the best. Similar to the case of diversion of investment demonstrated by Kindleberger, some member countries could expect desinvestment operations, as foreign firms would focus their production in a small number of member countries. Thus, the strongly defended arguments in favour of a growth of FDI flows coming from non-member countries, seem to be ambiguous and irrelevant.

It is possible to sustain that studies done and experience derived so far, do not allow to foresee the consequences of RIAs on the flow of FDI coming from country members. However, it is possible that if the FDI coming for the region and those coming from the rest of the world (ROW) are substitutable, the most probable effect of RIA will be to level up the intra-regional investment in comparison with the one coming from the ROW. This section

which has analyzed the relationship between trade policy and FDI attraction has shown how the ability of an economy to attract FDI could be influenced by the changes in trade policy.

Another aspect, which must be noted, is related to the effect of the variation of FDI on exports volume of the receiving country. This aspect is the more interesting to take into consideration in the cases of developing countries seeking the expansion of their exports and the strategy to decrease the deficit of their payment balance - the two vectors which constitute the main objectives of the policy of FDI attraction.

Many economists consider that FDI reduces the imports of the receiving country and/or increases its exportations. This point of view finds its origin in the traditional theory concerning FDI based on the idea that it is possible to use foreign production in replacement of the exportations towards foreign markets. Two factors explain to some extent this traditional theory according to which the FDI and the imports of the receiving country are substitutable. Firstly, the theoretical article of Mundell (1957) shows that according to some restrictive hypothesis (simplified), the free circulation of capital and manpower could be substituted to the liberty of trade. This means that the free mobility of production factors could have the same results as the free trade of goods and services. A relation of substitution between the capital flows and trade is in the core of this analysis. Secondly, policies of exploitation replacement have been successful in many regions of the developing world until the beginning of the 1980s. As already noted, the obstacles set up against importation have encouraged, as wished by the governments which impose them, the FDI aims at avoiding duties, the result being that the local production replaces imports. However, and in the measure where FDI contributes to the growth of export of the receiving country, it is probable that imports of equipment goods and intermediary consumption goods increase in the receiving country, whereas imports of finished goods decrease.

Detailed studies on FDI in the sector of extractive industries and other resource industries have confirmed the existence of a positive correlation between FDI and exploitation of the receiving country (Hill, 1990). Many studies on a wide range of sectors have also concluded that there is a positive correlation between the total flow of FDI and the total exportations of receiving countries (Hummel and Stern, 1994, for example).

FDI Inflows to Tunisia: Evolution, Regulation and Main Determinants

FDI Importance in Tunisia

FDI is a requirement for countries whose national savings are insufficient to cope with financing needs. This is the case for most developing countries and a good example is Tunisia. However, the mobilization of such funds is not easy since it must result at the same time from the obligation or the obvious wish of foreign investors to deploy and from the desire of the host country to attract foreign capital. The new political orientation aimed at lifting the controls and obstacles to the free movement of foreign capital has generated an increase of investment flows on the world level four times larger than the increase of total GDP and three times larger than the increase of total world trade. But an increasingly tough competition has been established between developed countries themselves as well as between

developing countries to attract FDI.⁽³⁾ Compared to other countries, Tunisia doesn't seem to attract as much FDI as expected with regard to its performance.

Because of its various advantages, e.g. employment, technological transfer, access to international markets, financing source, productivity gains and competitiveness, growth, etc. FDI is coveted by developed as well as developing countries. Despite its volume, which remains beyond expectations, the importance of FDI in the Tunisian economy is more than essential on the macro-economic level. Indeed, FDI has shared in the financing of the current deficit at a height of 38.7% during the period 1986-1990 and 31.5% from 1991 to 1994 (Lahouel, 1999). As far as investments are concerned, and despite a decrease of 8.38% on average during the period 1980-1985 to 5.77% between 1981 and 1994, capital stock generated by FDI represents more than 20% of total private capital stock in Tunisia in 1999 (Lahouel, 1999).

On the employment level, jobs generated by FDI are concentrated in the textile, leather and shoes sectors. These industries are the most labor-intensive sectors and the most able to offer new employment opportunities among all other manufacturing industries, except in industries where the work-force employed is strongly dominated by unskilled workers with very weak skilled rates (between 1 and 3%). At the end of the year 1999, foreign companies employed more than 160 000 workers (7% of the total active population). Given its location in the export industries of the manufacturing sector, FDI has contributed to ameliorating this sector's growth's (+10% on average per year between 1972-1981 against only 3 to 5% per year for the GDP).

As far as technological transfer is concerned, it is only recently that real change had occurred following the progressive liberalization of highly technological sectors like telecommunications and other areas of highly intensive services in terms of capital and skilled labor.

Structure and Evolution of FDI in Tunisia

UNCTAD (1999) has put into evidence the rapid evolution of world trade illustrated by the quick development of FDI on an international scale. This report underscores the increase of FDI in 1998 in spite of the Asian crisis (644 billion US dollars in 1998 against 464 billion US dollars in 1994). The main FDI exporting and importing countries belong to the industrialized world as the EU, North America and Japan monopolize two thirds of the total FDI flows in the world. Already very low, Africa's share dropped even lower from 3.1 billion dollars to 2.6 billion dollars

The evolution of the FDI structure is strongly comparable to the evolution of the international trade of services and goods. Indeed, services attract at present 40% of the total FDI compared to 25% in the 1970s.

⁽³⁾ Policy makers have expressed concern in recent years that competition among governments to attract FDI is, or will soon become harmful to governments – both to governments that engage in the competition and to those that do not. This concern is growing rapidly as many developing and emerging economies turn from relatively inward-oriented economic policy regimes to much more outward-oriented and market-friendly policy regimes and actively seek to attract FDI (Oman, 2000).

Tunisia has attracted a net average flow of 123 million US dollars during the period 1992 to 1999, which corresponds to 0.2% of the world FDI. At present these FDI inflows appear to be essentially concentrated in three sectors, mainly energy (in the form of oil pipelines building or in oil search equipment), tourism and textiles. The part of the energy sector accounted 90% of the total volume of FDI during the period 1992-1995 and 45% during the fourth years following the application of the FTA with the European Union. On the other hand, the part of the manufacturing sector has increased during these two periods: growing from 3.4% during the first period to 46% in the second, while the growth of the tourist sector has more than doubled during this same time frame from 3.2 to 7.1% (Table 1). The relative increase in these two sectors is due to the privatization program in manufacturing sector and to the decline of investments in the energy sector during this period.

This sectoral distribution of FDI depends on the privatization process and on Tunisia's endowments of natural and other production resources. Manufacturing companies are the first targets of privatization in Tunisia, so this sector's share is dominant in total FDI. The privatization of services comes second, with the sale of state-owned companies especially in tourism. Export-oriented investors attracted by the labor-force and by generous incentives have undertaken greenfield investment in the mechanics, electric, electronic and textiles industries in Tunisia.

The reliance on privatization to attract FDI continues to cause annual fluctuation in the inflows into Tunisia. The increase in the volume of investments from 364 million US dollars in 1997 to 668 million US dollars in 1998 shows that Tunisia is considerably ameliorating its performance. It is interesting to note, however, that for the two years 1994 and 1998, the volume of FDI experienced a very large increase. The increase of 1994 may be explained by the building of the Mediterranean gas pipeline sending Algerian gas to Italy and by the investments realized on the Miskar oil Site, which is managed by British Gas, a firm which acts as an offshore company in Tunisia.

Although the privatization process in Tunisia has been considered as slow (IMF 1999), foreign participation remains very modest. It was only in 1998 that foreign participation increased sharply with the privatization of two cement factories on behalf of two foreign companies. This privatization totalled nearly 400 million US dollars, which represents more than the sum of benefits stemming from privatization during the 1987- 1997 decade and more than the two-thirds of all the FDI registered in the course of 1998.

Despite what might have been expected, FDI inflows to Tunisia have not intensified following the conclusion of the FTA with the EU. On the contrary, Tunisia has not been able to benefit from the expansion of world FDI flows. If the privatization operations or the investments in the energy sector are not taken into account, Tunisia has experienced a significant decline in terms of FDI flows since it signed an FTA (restricted to industrialized products) with the European Union in 1995. Indeed, the FDI/GDP ratio has lost 1 to 3 points between 1992-1995 and 1996-1999. It is obvious that the expansion of the FDI flows observed in various parts of the world these past years has not profited Tunisia. However, it is still too soon to evaluate the real impact of this agreement on the amount of FDI as it only came into effect in March 1998, albeit Tunisia started its application two years before.

Looking at the origin of the FDI, a similar pattern may be observed for FDI than for foreign trade, i.e. 70% came from EU countries, with Italy by far the most important supplier

of FDI before France and Germany. The main non-European source of investment was the United States (13%), and the Arab countries (10%).

Table 1. Trend in Direct Foreign investments in Tunisia - Breakdown by Beneficiary Sector (in million US Dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
Total	514.0	657.3	536.4	322.5	280.1	364.3	668.3	368.0
Energy	89.0	92.9	90.0	84.9	62.9	60.8	23.4	37.5
Tourism and real estate	2.5	1.1	3.1	9.7	18.3	5.2	2.8	7.2
Financial Institutions	0.6	1.1	0	0	0	0	0	0
Manufacturing Industries	2.9	2.3	2.6	8.4	18.7	19.3	60.6	38.1
Other Sectors	4.5	2.3	3.2	2.5	2.9	5.2	1.1	1.4

Source: Calculation based on data from the Central Bank of Tunisia..

Attracting Investment and FDI Inflows in Tunisia: Shortcomings of the Present System

The importance of FDI in the development and growth process of a developing country like Tunisia is obvious. Indeed, a weak mobilization of the national savings and a growing need of technological transfer must be added to the weakness of domestic private investment. Only the private sector could assure the amelioration of standards of living, the reduction of unemployment rates and the substitution, in an adjustment context, to the state's disengagement from competitive activities. The domestic private investment and FDI are key elements for the economic takeoff of the country as well as the only ones able to cushion the shock stemming from liberalization and the state disengagement from activities where the production and the marketing of goods and services are concerned. As a result, in the beginning of the 1970s, Tunisia established a code, i.e. Law No. 120/1993, the Investment Incentives Code with the objective to attract investment. This law was amended in the middle of the 1990s to cope with the new orientations and objectives of the Tunisian economic policy. This unique code which was founded on the freedom of investment, offers specific and substantial advantages to both national and foreign investors. The Tunisian code of investment promotion grants four main types of advantages: (a) Reinvested profits become tax-free within the limit of 35% of the taxed revenues and profits; (b) Custom duty exemption over equipment goods, which cannot be found locally; (c) Limitation of the VAT to 10% on the import of equipment goods; and (d) The possibility to benefit from repayment schedule regime for all production equipment and other materials whose period of use has exceeded seven years.

In addition to the various measures taken to attract investments, additional advantages are granted to certain investments, especially to those which are export-oriented. Partially exporting firms as well as the totally exporting ones benefit from extra measures to attract investment. Regarding partially exporting firms, these measures consist of complete tax exemption on profits linked to export during the initial ten years and, starting from the eleventh year, an exemption to a maximum of 50% for an unlimited period of time.

Additional advantages for totally exporting companies consist of: (a) complete exemption for reinvested profits and revenues; (b) total exemption of duties and taxes concerning equipment goods, including goods shipping equipment, raw materials, semi-products, and services necessary to the production; and (c) the right to put on sale up to 20% of their production on the local market. Commercialised products remain under the taxes and duties in force.

There are also other kinds of investments benefiting from additional incentives. These investments may be located in various particular fields, namely investments that help the development of poor areas, agricultural development, environment protection and technological promotion field.

Main FDI Motivations in Tunisia

The flows of foreign capital have experienced a growth in the field of FDI in recent years. Characteristics of these various financing types vary according to an important number of elements including economic maturity, the importance of the economic risk, the technological progress, etc. (Lankes and Stern, 1999).

The standard theory of customs union of Viners (1950) has shown how ambiguous the effects of regional integration are on member countries. Some studies have been carried out, however, which identify the reasons why an economy would better benefit from an RIA than another economy (Venables, 1999). As already discussed, the way for signatory developing countries to benefit from an RIA is to attract FDI. Consequently, the reason why foreign investors invest in Tunisia and the criteria for setting up these investments, must be explored.

The WTO (1996) distinguishes two main categories in the investments made by multinational firms, both of which are very important to the host country's economy. The first category tends to stress the importance of the vertical FDI, i.e. the realization of the different steps of production in various and different countries. It is generally considered that this kind of investment results from the difference of the production costs of various countries. In other words, firms localize their production operations in different countries in order to reduce to a minimum their production costs. This type of investment should be further encouraged to establish in the receiving country which has free access to a large economic market so as firms profiting from the low production costs in the receiving country as well as from the scale economies.

The other main category of investments made by multinational companies is concerned with horizontal FDI. In this type of investments, all analogous production operations are made in different countries. The reliance of these FDI flows on local production is motivated by the high transport costs. This explains the fact that some products have to be made close to the consumers. This type of investment may also be explained by the existence of trade obstacles or the desire to circumvent customs duties or even by the wish to reduce the risk of future protection measures. The existence in the receiving country of promotion fiscal regimes towards foreign investors, could be an additional condition to the attraction of both categories of FDI.

Three main reasons influencing the decision of foreign investors to invest in Tunisia may be identified: (a) Participation in the extraction of natural resources; (b) profit from low wages and fiscal advantages and; (c) selling on the local market. However, there are other

elements which could direct FDI to Tunisia. Generally, FDI is not attracted to countries where business management is inadequate. Indeed, inappropriate infrastructures, a regulation of the labor market, and an influential and slow bureaucracy, are among the elements, which could make FDI turn away, even though the market offers good investment perspectives. In addition, import restrictions discourage FDI if they concern intermediate inputs and equipment goods. High tariffs and long administrative time limits for customs approaches engender high transaction costs and constitute an obstacle to the attraction of FDI. The efficiency of the receiving country's economy is another determinant to FDI. Countries with a skilled labor can hope to attract FDI, which are intensive in terms of skilled labor. Good infrastructures and support services as well as efficient public institutions are very much needed to reduce the time limits for the delivery of inputs and outputs (Lahouel, 1999).

Trade Liberalization in Tunisia and the System of Investment Incentives: Complementary or Divergent?

The policy to attract foreign investment used since 1972 (offshore company laws which offer duty free access to all inputs and tax-free status) has certainly a positive effect on the attraction of FDI. There are more than 1600 foreign or joint companies operating in Tunisia in 1996. Foreign investment is particularly important in the manufacturing industries with approximately 1200 companies operating in the fields of textile, leather, mechanics, electronics and in the electrical industry. As far as tourism is concerned, about 156 hotel establishments are totally or partially promoted by foreign investors in 1996. More than 43 foreign companies are active in the sectors of export, research and in the exploitation and international conveyance of hydrocarbons.

At the end of 1996, the agricultural sector has attracted nearly 117 million US dollars of FDI mainly oriented towards the branches of big-scale farming, breeding and fishing. However, foreign companies can not lease agricultural land. Other sectors with high production and selling capacities also present investment opportunities such as floriculture, processing and packaging of vegetables and fruits, electrical and motor components, pharmaceutical products, the shoe and glass industries, ceramics, computer products, etc.

The participation of offshore companies in the total value of goods exported in 1996 reached 64%, while their share on good imports attained the level of 47%. Offshore companies' main imports cover intermediate products and equipment goods. Reaching the amount of 2465.2 million US Dollars in 1996, offshore company imports are formed through 89% of intermediate consumption products.

The strong participation of offshore companies in the total exports of Tunisia and their presence in industries that are intensive on unskilled labor, does not reflect the distribution of the production between the general regime and the offshore regime. Totally exporting offshore companies fully profiting from the fiscal and other advantages granted to them by the Investment Incentives Code, are strongly regulated as far as the selling of their products is concerned. To this effect and to protect national industries, foreign companies have not been allowed to sell their products on the local market until 1996, when they have been authorized to sell up to 20% of their production in the local market. Foreign presence remains very weak in fields where there is no sale of production. In this case, foreign participation limits itself to some sectors where it is requested, e.g. tourism. This statutory frame which fixes at the same time the sectors which could benefit from investment incentives, and the marketing conditions of the companies' production, explains the weakness of FDI volume.

The present system of investment promotion in Tunisia may be considered as a non-tariff barrier to free trade. Many reasons may account for this. The present system does not enable competition between offshore companies' products and those of onshore firms. Moreover, this competition may have played a role in preparing the Tunisian product to face the import of foreign products.

The system of protection to the international trade of services designed by the Tunisian economic policy, is strictly followed by the Investment Incentives Code. The present system has not allowed a diversification of FDI, as these remain limited to activities intensive on unskilled labor. The need to reinforce the technological transfer and the growing use of a more skilled labor may only be provided by investments which are intensive in terms of capital and investments with a strong value added.

In spite of its barriers remaining at high levels, Tunisia's trade policy has experienced a radical change compared to that of the EU countries. These changes will certainly have weak effects on the orientation of the firms for exportations due to the fact that Tunisian exporting companies do not pay custom tariffs either on their intermediary consumption or on their equipment goods, this even before the implementation of the partnership agreement with the European Union. However, this could have an indirect effect in the sense that local enterprises of services and of agricultural nature, could benefit from a significant reduction of the Tunisian tariffs, and thus, from a reduction of the cost of their imports (Lahouel 1999). To date, measures adopted by Tunisia to liberalize the right of establishment refer only to WTO commitments.

Modelling Trade and FDI

Although the impact of the FTA on the FDI inflows to less developed countries is ambiguous, the hypothesis that they could be increased, seems more realistic especially if foreign companies are authorized to sell their products in the domestic market. This kind of analysis concerning the impact of FTA has been the subject of several studies, but is still not found in the Computable General Equilibrium (CGE) model of trade analysis. Thus, looking at the multi-regional CGE model, the movement of capital between regions could simply be based on capital productivity. The problem is different if a regional CGE model is used for a single country.

Two options may be approached. The first one consists in setting exogenous FDI growth rates and to simulate their impact on the whole economy. Although this method helps to identify the impact of FDI inflows, it does not allow identifying the relationship between trade liberalization and needs of FDI. It is this last aspect which deserves a wider empirical analysis.

The General Equilibrium Model

The following section is not intended to describe precisely the characteristics of the model employed here, which contains around six thousand equations. The reader may refer for this purpose to Beghin *et al.* (1996) for a formal presentation of this class of models. Rather, this section is intended to describe in non-mathematical terms the main hypotheses, mechanisms and statistical information used for Tunisia.

In this model, prices are endogenous on each market (goods, factors) and equalize supplies and demands, so as to obtain the equilibrium. The equilibrium is general in the sense that it concerns all markets simultaneously. The model uses the information contained in Tunisia's Social Accounts Matrix for 1992 (Chemingui and Dessus, 1999). It considers 57 economic sectors and five types of work are taken into account, these being distinguished notably by their levels of qualification and geographical mobility. The model takes into account three types of capital: (a) physical capital; (b) reserves of natural resources (crude oil, phosphates); and (c) land. Finally, the model distinguishes two trading partners for Tunisia: (a) the European Union (EU); and (b) the Rest of the World (ROW). The model is dynamic and is resolved recursively each three years from 1992 to 2010. Its main features are summarized below.

Production. The Constant Elasticity Substitution (CES) production function is constructed in such a way as to represent successive decisions in the choice of production factors, determined by the desire to minimize production costs. The production function has constant return to scale. Output results from two composite goods, i.e. intermediate consumption and value added plus energy. The intermediate aggregate is obtained by combining all products in fixed proportions (Leontieff structure). The value-added and energy components are decomposed in two parts i.e., aggregate labor and capital plus energy. Labor demand then breaks down into five categories.⁽⁴⁾ Within each segment, labor is totally mobile and completely employed. The composite capital/energy factor is desegregated into capital and energy. Demand for physical capital makes a distinction between "old" capital and "new" capital. The model thus integrates the notion of vintage capital to distinguish the process of allocating capital already installed, from that resulting from contemporary investment (putty/semi-putty production function). "New" capital can be allocated more flexibly than "old" capital. It substitutes for other types of capital more easily (land, natural resources). Accelerating investment therefore strengthens the capacity for adjustment of the productive sector to changes in relative prices. Finally, the energy aggregate is comprised of two types of energy, i.e. oil/gas and electricity, which are substitutes.

Distribution of Income and Absorption. Income from labor is allocated among various households using a standardized fixed-coefficient distribution matrix. Income from capital is allocated in the same way among households, companies and foreign investors. Companies pay tax on this income and save the remainder. Household demand is derived from maximizing the utility function following the Extended Linear Expenditure System (ELES) system (Luch, 1973), specific to each household, subject to the constraints of available income and consumer price vector. Household utility is a positive function of consumption of the various products and savings. Income elasticities are differentiated by product and by household, and vary from 0.75 for staple products for richest households to 1.20 for services. The calibration of the model determines a per capita subsistence minimum for each product, whose aggregate consumption grows with population, while the remaining demand is derived through an optimization process. Government and investment demands are desegregated in sectoral demands once their total value is determined according to fixed coefficient functions.

⁽⁴⁾ The 5 types of work are distinguished notably by their levels of qualification and geographical mobility: 3 are rural, 1 urban, and 1 allocated to the whole of the country.

International Trade. The model assumes imperfect substitution among goods originating from different geographical areas. Import demand results from a CES aggregation function of domestic and imported goods (Armington, 1969). Export supply is symmetrically modelled as a Constant Elasticity of Transformation (CET) function. Producers decide to allocate their output to domestic or foreign markets responding to relative prices. At the second stage, importers (exporters) choose the optimal choice of demand (supply) across regions, again as a function of the relative imports (exports) prices and the degree of substitution across regions. Substitution elasticity between domestic and imported products is set at 2.2 and at 5.0 between imported products according to origin (EU or ROW). The elasticity of transformation between products intended for the domestic market and products for export are 5.0 and 8.0 between the different destinations for export products. The small country assumption holds, Tunisia being unable to change world prices. Thus, its imports and exports prices are exogenous. Capital transfers are exogenous as well, and determine the trade balance.

Model Closure and Dynamics. The equilibrium condition on the balance of payments is combined with other closure rules so that the model may be solved for each period. Firstly, the government budget is considered. Its surplus/deficit is exogenous and the household income tax schedule shifts in order to achieve the predetermined net government position. Secondly, investment is savings-driven, the latter originating from households, enterprises, government and abroad. The sequential dynamic path of the model results from this closure rule. A change in savings influences capital accumulation in the following period. Finally, exogenously determined growth rates are assumed for other factors that affect the growth path of the economy, such as population, labor supply and total factor productivity (TFP). Agents are assumed to be myopic and to base their decisions on static expectations.

Instruments of Economic Policy. The model considers a large set of policy instruments, some of which have been mentioned previously. To name a few, these are: production subsidies (by activity), consumption subsidies (by product), value added taxes (by activity), other indirect taxes (by activity), tariff barriers (by imported product and by origin), non-tariff barriers (by imported product and by origin), direct taxes (by household), and taxes on corporate profits. The model also describes the tariff policy implemented by the EU for Tunisian exports, and tariff quotas policies applied by Tunisia and the EU. The modelling of these different policy instruments is of conventional type. It defines each instrument as a tax on the relevant resource. For example, a production subsidy is modelled as a negative tax on the producer price. In the case of tariff quotas, the process is a little more complex, but boils down to expressing the average tariff level as the average of the preferential and non-preferential tariffs, weighted by the volume of the imported products in each quota. If M is the total imported volume, \bar{M} the volume level below which preferential tariff t_A is applied, and t_B the non-preferential tariff ($t_A < t_B$), then the average tariff t for all imports of a product verifies the following:

$$t M = t_A \min[M, \bar{M}] + t_B \max[M - \bar{M}, 0] \quad (1)$$

Since imports subject to these regulatory controls are usually placed under the administrative authority of a public agency, it is assumed that the latter passes on the average tariff to the imported product's domestic price, so as not to penalize one category of importer of the same product more than others. This average tariff is therefore endogenous in the

model, since total imports are endogenous. If total demand for imports exceeds quota \bar{M} , the nominal level of protection can rise up to the point at which the domestic price of the imported product is equal to the marginal utility provided by consuming it.

Accumulation and FDI. The approach developed by Rutherford and Tarr (1997) and applied to Egypt by Dessus and Eisenmann (2000) is used. This approach consists in assuming that the stock of available capital of each country is optimal and chosen according only to its productivity. Thus, if the output rate of the capital increases (after trade liberalization for example), the agents will be incited to invest until the marginal productivity of the capital finds the level it had before the reform. This hypothesis is not credible in this form as it implicitly supposes that the agents (households, firms, government and foreign investors) could have access to the desired loan without obstacles, or that they could equally increase their saving rates (Dessus and Eisenmann, 2000). However, in reality, it could be that in such a situation, agents choose to fill in only one part of the stock of the missing capital so as to not reduce drastically their present consumption or simply because they are obliged to do so if they can't have access to their national demand of funds. This approach presents however the merit of underlining the existence of a new potential of investments linked to the FTA if the latter leads to an increased productivity of the physical capital. The results of the econometric analysis on Egypt have shown that if accompanied by positive externalities, the FTA could increase in a significant manner the productivity of the physical capital. This method consists of explaining the creation of the fixed capital with a multiple regression model where the growth rate of the capital fits in its long term target which itself depends on the observed capital productivity and the domestic saving rate.

The following equation is applied for the period 1977 to 1999. According Dessus and Eisenmann (2000), the econometric model is written as follows:

$$\ln(K_{(t+1)} / K_{(t)}) = C + (1 - \lambda)\ln(K_{(t)} / K_{(t-1)}) + \mu\ln R_{(t-1)} + \eta\ln S_{(t)} + U_{(t)}$$

K_t : initial capital stock.

r : the capital productivity (is measured by the marginal productivity of the physical capital).

s : the domestic saving rate (got from the INS).

U : endogenous variable, which helps to take into account the adjustment time limits.

Using an Ordinary Least Squares, the following results are observed (in parenthesis are the T-students statistics):

$$\ln(K_{t+1}/K_t) = 0.14 + 0.89\ln(K_t/K_{t-1}) + 0.11\ln r_{t-1} + 0.08\ln s_t \quad \text{adj. } R^2 = 0.67; \text{ DW} = 1.78$$

(1.82) (2.60) (2.55) (1.98)

In other words, an increase by 1% in the capital productivity augments by 0.11% the stock of the physical capital.

Discussion of Results

Construction of the Baseline Scenario

Several assumptions have been made to define what seems to be the plausible development of the Tunisian economy up to 2010, in the absence of new reforms. The definition of a benchmark is intended merely to define a baseline scenario to which alternative

policy scenarios may be compared to isolate the specific impact of the latter. The sensitivity analysis conducted (Chemingui and Dessus, 1999) suggests that the choice for exogenous variables within a realistic confidence interval, has no major consequences. The relative variations of the different economic aggregates with respect to the baseline scenario after policy shock seem uninfluenced by these *a priori* choices.

Growth Hypotheses. To construct a baseline scenario, the values of a number of variables need to be set. The rate of growth in Gross Domestic Product (GDP) is set in order to estimate a growth rate for TFP compatible with this development.⁽⁵⁾ A figure of 5.7% for the average annual GDP growth rate between 1998 and 2010 is chosen in accordance with the forecasts of the *Ninth Social and Economic Development Plan* (Ministry of Economic Development, 1998). Over the same period, the rural (urban) population is assumed to grow at an average annual rate of 1.0% (1.8%). Labor market supply grows by 0.9% (2.0%) yearly in rural (urban) areas.

Economic Policies Implemented in the Baseline Scenario. It is assumed here that the government continues with its policy of fiscal stabilization. Budget spending (excluding investment) increases in real terms by only 1.5% annually up to 2010. In the baseline scenario, public savings are endogenous. In the alternative scenarios, they are exogenous (and remain at their baseline level), and are obtained by endogenous shifting of the VAT vector.

While this working hypothesis is debatable even if it appears not to have major consequences on results as suggested by the sensitivity analysis, (see Chemingui and Dessus, 1999a), the inclusion of other changes in the economic policy reflects the formal undertakings given by the Tunisian government to the international community. The reference simulation therefore also incorporates the following policy changes. In connection with GATT implementation, non-tariff barriers are removed on agricultural products from 1995. Agricultural tariffs with all partners (consolidated in 1995) are reduced by 24% over the period 1995 to 2004. Agricultural subsidies are reduced by 13% between 1995 and 2004. In connection with the EU partnership agreement, tariffs on European industrial products are progressively reduced to zero between 1998 and 2010, and the EU slightly reduces between 1997 and 2001 its preferential tariff quotas applicable to Tunisian exports of beverages, citrus fruit and vegetables.

Major Findings

REF scenario. Table 2 reports the macro-economic results of the baseline (REF) and alternative policy scenario. Immediately follows a description of the macro-results of the REF which does not integrate the accumulation process linked to the partnership agreement with the EU.

From Table 2, it may be observed that the signing of the GATT and partnership agreements with the EU further integrates Tunisia into the system of international division of labor. Exports grow in volume terms at 8.1% per year, and imports at 6.2% between 1992 and 2010. Due to the preference granted by Tunisia to European industrial products, ROW's share of the market is approximately halved for industrial products. Without further incentives to

⁽⁵⁾ In constructing the baseline scenario, a figure is defined for the rate of growth in the economy. Total factor productivity (TFP) will then be endogenous. When simulating alternative policies, the previously estimated TFP becomes exogenous and the GDP endogenous.

Table 2. Macroeconomic Results

	1992	REF(2010)	FDI(2010)
Real Gross Domestic Product	12.31	5.75	6.12
Output	27.17	5.85	6.20
• Agriculture and Food products	6.35	4.01	4.18
• Industrial Products	11.88	6.22	6.74
• Services	8.93	6.44	6.65
Private consumption	9.82	5.65	6.00
Investment	3.65	5.11	5.86
Public expenditure	2.19	1.50	1.50
Exports	4.23	8.13	8.40
• To EU	3.33	7.13	7.70
• To ROW	0.89	10.47	10.49
Imports	6.10	6.25	6.62
• From EU	4.53	6.94	7.42
• From ROW	1.57	3.64	4.10
VAT revenue	0.90	5.75	5.74
Tariff revenue	1.13	-0.68	-0.15
Physical capital stock	24.62	6.87	7.40
Real rural available income	776	1,751	1,955
Real urban available income	1,397	2,862	3,115
GDP deflator	1.00	0.03	0.05

N.B. For the year 1992, macroeconomic aggregates are expressed in billions of 1992 TND. For the 2010 scenarios, all variables presented are annual growth rate for the period 1992-2010.

substitute one source of agricultural imports for another, the share of agricultural imports originating in the ROW does, however, remain stable at around 60%. Gains in competitiveness allowing Tunisia to increase export market share, are not due to real depreciation, given that the price of value added remains unchanged, the cut in capital revenue being offset by the rise in real wages. These gains are in fact, due to the reduction in prices for imported input products and a lessening of the distortion of international trade other than in agriculture, a situation which benefits the industrial sector particularly. The latter encounters fewer constraints than the agricultural sector (limits on land suitable for cultivation) as regards to increases in its production. It is also more exposed to international competition, forcing it to make greater efforts to adapt.

As already emphasized above, the effort devoted to factor reallocation and to enhancing competitiveness is supplied virtually entirely by industry, which experiences a much more severe external shock than agriculture or food processing. A measure for the reallocation effort is the change in composition of the production vectors in each of these two activities. This indicates a level nine times higher in industry than in agriculture and food processing.

An increasingly high percentage of mobile production factors (physical capital and casual labor) is captured by industry, which acquires more substantial commercial outlets, especially abroad. Consequently, labor factor income rises more swiftly in non-agricultural than agricultural sectors.

FDI Scenario. This is a new simulation carried out, which in addition to the various trade liberalization commitments made by Tunisia, integrates the different modes of financing of the new investments. This simulation helps to identify the accumulation process which could be compatible with the capital productivity observed after the establishment of the FTA with the European Union (capital productivity observed in the baseline scenario to estimate the new physical capital stock is used).

According to this model, there exist four types of financing for new investments: (a) household's savings; (b) companies savings; (c) government savings, and (d) savings in the form of FDI of the two trading partners for Tunisia, the EU and ROW. Considering the continuation of the stabilization program of the public budget, it seems difficult to admit that the government could release additional savings. The decrease of industrial product prices following tariff reduction and the high increase of households' debt rate, is very likely to reduce household savings. Thus, foreign savings would rather realize the financing of new investments although a slight local participation could be possible.

This hypothesis concerning the financing mode of the new investments, helps to relieve the constraint about the balance of payments of Tunisia by allowing more imports for a same level of exports (Dessus and Eisenmann, 2000). This may lead to an additional increase of the global level of factors productivity and consequently to an increase of the available capital stock.

In this simulation, the financing of new investment⁽⁶⁾ is only realized by foreign savings, corresponding to an increase of 4.6% of the urban households available income and 5.3% for that of the rural household.

In the long term, the new equilibrium will correspond to an accumulation rhythm of 5.8% between 1992 and 2010. The GDP is now increasing at a rate of 6.1 % while the investment rate reaches 29 % of GDP.

Conclusion

One important benefit that Tunisia expects from the bilateral partnership agreement signed with the EU is the attraction of larger foreign investment inflows, not only from the EU

⁽⁶⁾ The rate of annual growth of new investment used in this simulation is estimated using the econometric model on the basis of the growth of the TFP observed in the baseline scenario.

but from other regions as well. Along with the increase in European financial and technical assistance, this is the most often mentioned advantage.

The partnership agreement between Tunisia and the EU has the potential of playing a catalytic role in increasing the openness of the Tunisian economy and attracting FDI. The partnership agreement will help in encouraging investment (decrease in imported inputs price) and improving the allocation of resources by increasing the total productivity of production factors, but a negative list discourages FDI in some priority sectors.⁽⁷⁾ In addition to these restrictions, the rights of establishment for foreign investors is not totally liberalized. Authorization is still required if the foreign capital share exceeds 49% for onshore companies in some sectors, but still totally prohibited for other sectors (mainly in some service sectors).

The empirical analysis shows that the investment potential created by the partnership agreement as well as the growth of FDI inflows to Tunisia, are conditioned by the existence of important capital productivity. Indeed, even if the liberalization is extended to agricultural products and services, Tunisia could not expect important welfare gains without a vital increase of capital productivity.

⁽⁷⁾ Mainly restrictions to sell up to 20% of off shores companies' production on the local market, and restrictions related to employment and compensation of expatriated employees.

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