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The European Neighborhood policy: towards a new EU-MED partnership? *

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Abstract

The aim of the present work is to test empirically the feasibility of the broad expectations regarding the effects of ENP on the EU-MED economic partnership. More specifically, it presents firstly a gravity analysis of the patterns of trade in the EU-MED area to test the actual dimension of unexploited trade as well as the level of trade potentials after the ENP and the EU-MED FTA will take place. Secondly, it analyzes the relative degree of macroeconomic instability in the region by checking the patterns of volatility of per capita consumption in the EU-MED partner countries. The gravity estimates show the existence of a large amount of unexploited trade in the context of the EU-MED partnership but a slow pace of exports' growth performance driven by ENP and EU-MED FTA project, even in the most “optimistic” scenario. The analysis of volatility highlights the MPs low ability to maintain a stable path of consumption. Thus, MPs remain more exposed to the occurrence of the external negative covariate shocks, associated with trade liberalization, with a strong probability of long term negative effects in aggregate welfare, even in a context of positive growth. According to these first results, ENP seems to be unfit to promote further integration and liberalization in the area as well as the “stake in the internal market” for MPs. It undermines a number of key issues and collateral policies which remain fundamental for the success of the EU-MED integration process, such as the role of regional South-South integration and the adoption of early warning mechanisms and preventive policies to reduce the probability of negative shocks induced by trade liberalization.

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1. THE EU-MED PARTNERSHIP: OBJECTIVES AND ACHIEVEMENTS

By launching the EU-Med Partnership in 1995, EU has set the ambitious aim of integrating 15 highly industrialized countries with 12 Mediterranean intermediate revenue primary resource based countries. The main economic target of the Barcelona Declaration (November, 27-28 1995) was the creation by 2010 of an EU-MED Free Trade Area (FTA), by means of a set of Bilateral Association Agreements signed between EU and 12 Mediterranean Partners (MPs)¹. The hoped for EU-MED FTA will include 40 countries and about 800 million consumers², becoming one of the most important North-South trade blocs in the world.

The liberalization process envisaged by the EU-MED FTA consists of the total removal of tariff barriers on industrial goods over a period of 15 years and a gradual liberalization of agricultural products and services. Both liberalizations are to be implemented in accordance with WTO multilateral rules. Liberalization of manufacturing products has been thought as asymmetric: all EU tariffs for industrial products originating from MPs will be eliminated while Mediterranean countries undergo a gradual and differentiated reduction of duties over 12 years. Concerning agriculture, the agreements stipulate reductions in duties and equivalent measures only for a limited number of products listed in the annexes and protocols. The aim is to consolidate and in some cases improve the existing access on a preferential basis, with provisions for review at some time after the agreement has come into force. In this case, there is not agreement on a specific timetable of liberalization. Finally, regarding the services' sector, the agreements contain a confirmation of the commitments already undertaken under the General Agreement on Trade in Services (GATS) for those MPs that are also WTO members.

The Association Agreements also establish that imported goods must comply with standards, regulations and certification procedures, and that the validity of the agreements is linked to other correlated measures such as the protection of intellectual property rights, workers' rights, environment issues, etc. Even if they are lacking details on how to comply in most of these areas, they are supposed to foster the reduction of Non Tariff Barriers (NTBs) by means of harmonization or mutual recognition of standards and regulations.

Ten years after the launch of the Barcelona Process a number of goals have been achieved. Every Mediterranean country is currently involved in the EU-Med Partnership, except Syria, included the Palestinian Authority holding an Interim Euro-Mediterranean Association Agreement (Fig. 1). These agreements, that collectively replace the previous generation of cooperation agreements signed in the 1970s, cover a large variety of economic, social, cultural and financial co-operation themes and constitute the foundation for the development of free trade in the Mediterranean region.

¹ Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Syria, Tunisia, Turkey and Palestinian Authority. (i.e. 11 out of 12 MPs with which EEC signed in the Sixties the Cooperation Agreement).

² Including the EU-EFTA Agreement and the separate EU-Switzerland Agreement.

Fig.1 Euro-Mediterranean Association Agreements

| Med Country | Status | Date signed | Entry into Force |
|-----------------------|---------------------------------|---------------|----------------------------------|
| Algeria | Signed | April 2002 | September 2005 |
| Egypt | Signed | June 2001 | June 2004 |
| Israel | Signed | Nov 1995 | June 2000 |
| Jordan | Signed | Nov 1997 | May 2002 |
| Lebanon | Signed | June 2002 | April 2006 * |
| Morocco | Signed | Feb 1996 | March 2000 |
| Palestinian Authority | Signed | Feb 1997 | July 1997 (Interim Agreement) |
| Syria | Initialed (Oct. 04) | | |
| Tunisia | Signed | July 1995 | March 1998 |
| Turkey | January 1996 (Customs Union) | Customs Union | Customs Union |

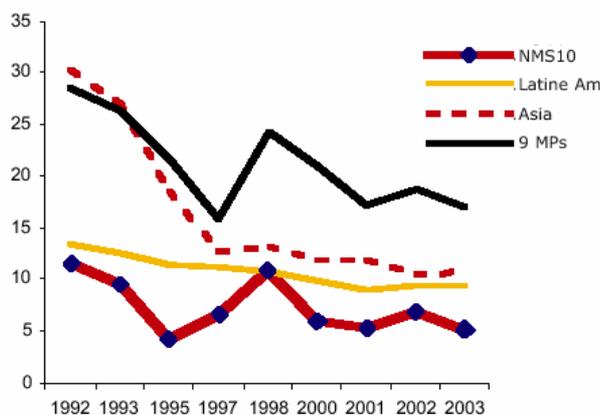
* An Interim Agreement on trade and trade-related provisions signed in July 2002 and in force since March 2003, governed trade relations beforehand.

Association Agreements provide for trade liberalization of manufactured goods with free access for MPs' exports and gradual tariff dismantling over transitional period for EU exports. Indeed, from 1995 till date, MPs, even though at a different speed, have registered a dramatic decrease of industrial goods tariffs' barriers (about -11%). MPs' tariffs still remain higher on average (17%) in comparison with the new acceding countries of Central and Eastern Europe (5,2%); Latin American Countries (9,5%) and Asian Developing Countries (10,8%) (Fig. 2). However, if we do take into account the weighted average instead of the simple average, MPs overall level of protections does not differ sensibly from that of the other groups of countries. In the case of Mediterranean countries, in fact, the differences between simple and weighted averages are the highest in the world. It means that tariff levels are still too high on certain products and/or sectors and at the same time extremely low in others. Moreover, apart from Israel, and to a lesser degree Egypt, Mediterranean countries hardly apply non-“ad valorem” customs duty (Femise, 2005).

The 42 members of the PanEuroMed system have also adopted a “PanEuroMed Protocol on cumulation of origin”³. It allows economic operators to cumulate processing made in different countries of the region and thus obtain preferential treatment. More precisely, products which have obtained originating status in one of the 42 countries may be added to products originating in any other one of the 42 without losing their originating status within the Pan-Euro-Med zone. The conclusion of South-South FTAs among the Mediterranean partners with the same origin protocol will allow them to effectively benefit from this facility.

³ The system of Pan-Euro-Med cumulation of origin is an extension of the previous system of Pan-European cumulation. It operates between the EC and the Member States of the European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland) and Turkey and countries which signed the Barcelona Declaration, namely Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia and the Palestinian Authority of the West Bank and Gaza Strip.

Fig.2 Comparison in the evolution of the simple average of MFN customs duty on industrial goods between the main regions



Source: Femise, 2005

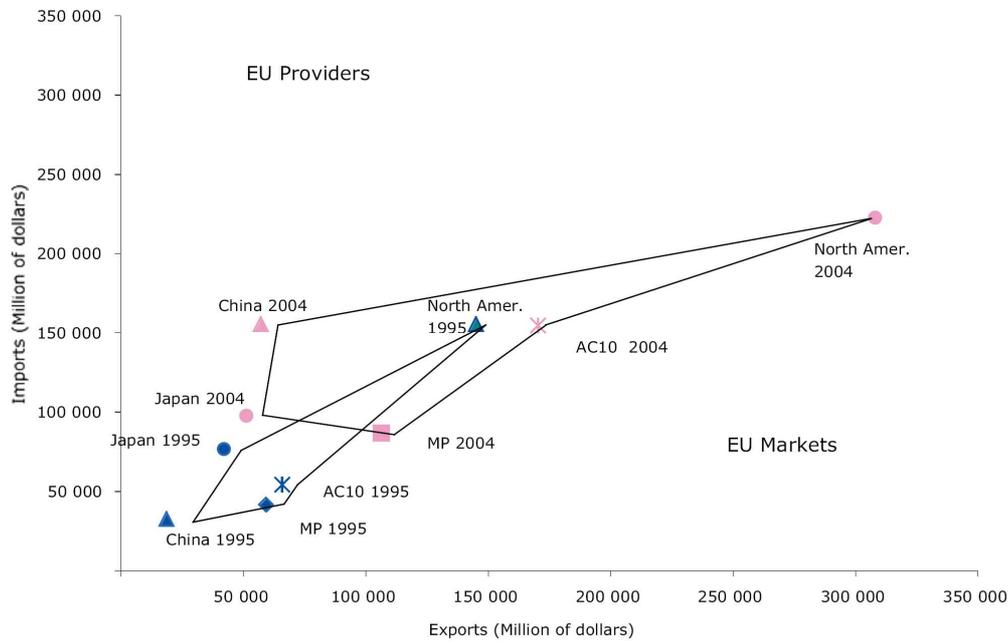
Liberalization of trade in agriculture is largely achieved as well. More than 80% of agricultural products imported from the Mediterranean countries enter the EU market duty free or at reduced rates. Reciprocally, one third of the EU exports of agricultural products benefit from preferential treatment in the Mediterranean countries. Liberalization of trade in services and investment, including the right of establishment, is also part of the Association Agreements' key objectives. The Istanbul Framework Protocol, endorsed in July 2004, has defined the core principles of services liberalization, including a regional Most Favored Nations (MFN) clause able to ensure the consistency and coherence of the bilateral agreements.

The Barcelona process goes well beyond trade integration, including a real political project of co-development and shared prosperity supported by technical assistance, financial transfers and actions of sub-national bilateral co-operations. In line with the priorities agreed upon at the Barcelona Summit, the European Commission has also launched several initiatives of deepening trade liberalization; regulatory convergence; strengthening legal framework. With the aim to support the implementation of all the regional aspects of the Association Agreements, EU has transferred funds for a total amount of nearly €8.8 billion to MPs under the MEDA Program (1995-2006).

Notwithstanding the above achievements, feelings about the actual effects of the Mediterranean partnership are mixed. The overall trade position of MPs shows a global deficit of 51 billion dollars (65 billion dollars in non petroleum trade) while current EU-MED trade relationship remains weak and asymmetric. EU accounts for about 70% of MPs trade deficit in manufactured goods and almost 30% of the global deficit (Femise, 2006). Moreover, notwithstanding the launch of the EU-MED partnership, EU-MED trade relations have worsened in relative terms. In the period 1995-2004, while EU trade flows have widened with China and North America (see geometrical figure in fig. 3), the relative performance of MPs remains steady. As a result, the gap between MPs and

New Acceding Countries of Central and Eastern Europe (AC10) on trade relations with EU has widened.

Fig. 3 EU-15 Trade evolution with its main partners (1995-2004, millions US\$)

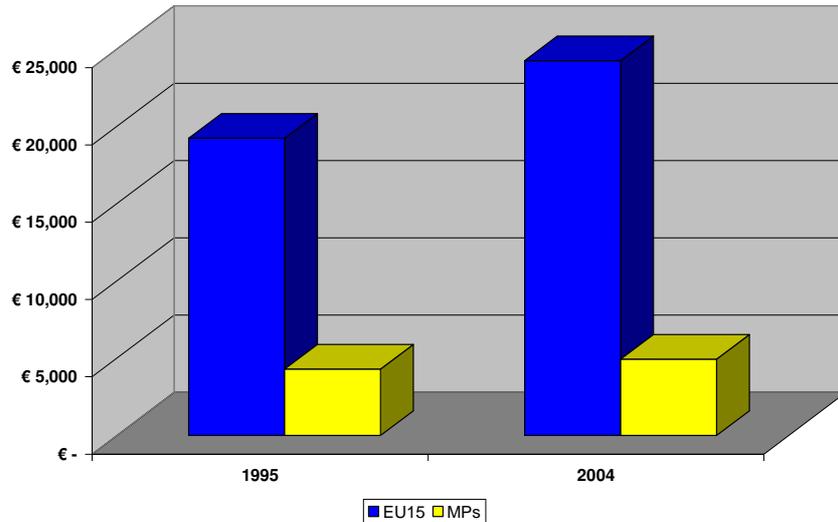


Source: Femise, 2006

In addition to bilateral trade enforcement through the Association Agreements, the Barcelona Process has fostered also a process of regional (South-South) integration among the Mediterranean countries. The Arab-Mediterranean Free Trade Agreement, known as the Agadir Agreement, foresees the creation of an integrated market between Egypt, Jordan, Morocco and Tunisia. Besides the Agadir Agreement, Israel and Jordan have signed a FTA, Morocco and Tunisia have signed bilateral agreements with Turkey, and negotiations are underway between other Mediterranean countries to establish similar agreements with Turkey. However, till date, intraregional trade remains well below 10% of the MPs' total trade, the lowest in the world for any region of this size. Policymakers are conscious that South-South integration between the Mediterranean countries remains an essential complement to the EU-Med Association Agreements and a key factor to attract foreign direct investments and stimulate industrial and commercial competitiveness.

Also from a macroeconomic point of view, the gap between the North and South of the Mediterranean region remains wide (Fig. 4). Average per capita income (measured in PPP, constant value 2000, international dollars) of MPs (€ 4.937) is 4 times lower than that of EU-15 (€ 24.242) and the gap has surprisingly widened from 1995 till date.

Fig. 4 GDP per capita, PPP (constant 2000 international \$): A comparison between Eu-15 and MPs



Source: Author's elaboration on WDI (2006)

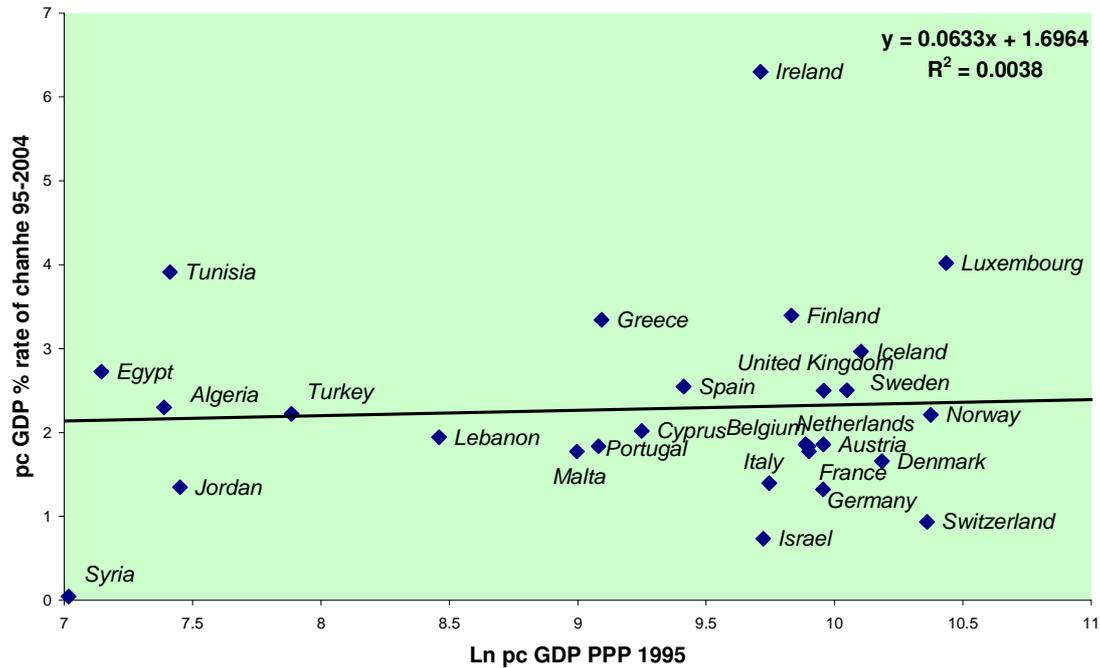
Indeed, there is no sign of income convergence within the EU-MED area, not even Barro e Sala-i-Martin (1995) hypothesis of β convergence⁴ (Fig. 5). The empirical test for Barro e Sala-i-Martin (1995) hypothesis of β convergence in the context of the EU-MED partnership is based on the assumption of a negative relationship, on average, between the level of income of partner countries and its relative rate of change for the period 1995-2004. In other words, richer countries are supposed to grow less than poorer ones⁵. However, as Fig. 5 clearly shows this assumption has not been verified in the case of EU-MED partnership, where there is no sign of a linear correlation between the relative level of income and growth performance of the partner's countries. For a substantive group of MPs a low level of income in 1995 has been associated to a very slow growth performance for the entire period (Egypt, Algeria, Jordan and Turkey).

Of course, the figure shows significant differences in growth performance and prospects in many countries in the region. However, the situation is worrying on average. Fortunately, the region as a whole is supposed to keep growing more rapidly than the world economy in the next future. Indeed, the current conjuncture brings the chance of a significantly improved economic performance over the medium and longer term. However, this implies a strong ability of policymakers, particularly in the oil exporters' countries, to take full advantage of the positive trend as well as of their surpluses.

⁴ This hypothesis is based on the standard model of growth and implies that each country in the long run converges to a steady state.

⁵ Of course, it does not imply any reduction of income variance among countries during time.

Fig. 5 β convergence: an empirical test within the EU-MED Partnership (1995-2004)



Source: Author's elaboration on WDI (2006)

I. What EU-MED partnership after ENP?

As underlined, the European Neighborhood Policy (ENP) will complement the EU-MED partnership with the aim to consolidate and not substituting it. ENP introduces also an additional objective for MPs: the prospect of “a stake in the internal market” as well as further integration and liberalization with EU member countries in order to promote the free movement of people, goods, services and capitals. The novelty of the new policy consists in the goal to achieve a *deep integration* with EU neighbors, by moving from simply “negative integration” (i.e. total removal of trade obstacles) towards a process of “positive integration” (the creation of new instruments and institutions able to achieve common objectives)⁶. It implies the introduction of specific elements of the European legal framework by means of bilateral negotiations.

Undoubtedly, ENP represents a major breakthrough in the nature of EU-MED economic and political partnership. Thanks to ENP, the *acquis communautaire* becomes the tool to create a Pan-European partnership without the cost of a membership. Moreover, with the new European Neighborhood and Partnership Instrument (ENPI), EU will transfer 12 billion EURO for financing assistance to MPs for the period 2007-2013.

⁶ The term “*deep integration*” designs an economic integration process that goes beyond tariff barriers to include competition policy; FDI and service regulations, environmental and labor standards, government procurement, etc. (Nenci, 2003).

Some scholars argue ENP could in principle correct a number of deficiencies of the Euro-Mediterranean Partnership and help to get the original Euro Med partnership objective of contributing to social and economic stability of the Mediterranean area. Others support the view that ENP can help to replicate the new EU member states' transition successes for the EU-MED partnership, by overcoming current limits of the EU-MED partnership and fostering the creation of a Pan European Common Market. On the other hand, some analysts underline the fact that the neighborhood countries are poorer and more heterogeneous with respect of the new member states to follow the same path (Milcher, 2007). Others argue that ENP is unlikely to be seen as a fully satisfactory substitute for EU membership. It has been rather seen as a way to spoil MPs chances for EU accession (Del Salto, Schumacher, 2005).

Moreover, one should also take into account the strong reservations on the part of some EU member states towards the idea of extending the entire EU *acquis* to the southern MPs as well as their fears that the new EU-MED FTA will imply a loss of EU competitiveness in a number of sectors (such as agriculture, textiles, services, etc.). Conversely, one should consider the trade off for MPs between the costs of aligning legislation and rules with EU *acquis* and the gains linked to a simple status of partner. Indeed, ENP starts out with a conspicuous imbalance between the obligations and commitments of the two sides and therefore lacks of credibility (Emerson, 2004). Another trade off for MPs is currently in place between the call for a deep integration in the framework of the European regional partnership and the effects of undertaking a process of multilateral trade liberalization. The latter could imply same benefits, without the cost of trade diversion effects.

In spite of the above caveats, the expectations for the new policy effects in the Mediterranean area are very broad. The main results envisaged are: an increase in trade share (EU exports may profit from reduction of high MPs tariffs and the strong raise of trade in services); an increase in factor movement (indeed, capital movements seem to be strictly linked to macro stability and labor movement will probably be delayed because of the strong reservations made by a number of EU member States); an increased intra-industry specialization with an improved efficiency and higher gains from trade; a catching-up effect, cycle synchronization and policy anchor.

Generally speaking, policymakers are expecting that EU-MED FTA, together with the other two pillars of the Barcelona Declaration (the political and cultural ones), will provide a large impulse to the economic and political stability of the EU MED area. The creation of a better environment for trade and economic relations is supposed to foster trade volumes between MPs and EU member states as well as to contribute to the decrease of MPs socio-economic vulnerability by reducing uncertainty for the future, risks of negative external shocks and macroeconomic instability.

The aim of the present work is to test empirically the feasibility of the above expectations. More specifically, I will present firstly a gravity analysis of the patterns of trade in the EU-MED area to test the actual dimension of unexploited trade as well as the level of trade potentials after the ENP and the EU-MED FTA will take place. Secondly, I will analyze the relative degree of macroeconomic instability in the region

by checking the patterns of volatility of per capita consumption in the EU-MED partner countries.

2. Gravity “projections”

A gravity analysis of the panel data of the patterns of trade within the EU-MED area in the period 1995-2004 has been carried out to reach the first task. The estimated parameters from the gravity model have been used firstly to compute the gap between actual and “normal” trade (i.e. trade values predicted by the gravity equation) in the context of the EU-MED partnership and, secondly, to predict the potential variations of bilateral EU-MED trade flows induced by ENP.

This exercise follows the same path of other empirical works presented by Wang and Winters (1991), Collins and Rodrik (1991), Baldwin (1994), Montalbano (2003) to estimate the potential trade patterns within the European common market after the enlargement towards CEECs and by Ferragina et al. (2005) with a more specific focus on the EU-MED partnership.

Starting from Isaac Newton’s law of gravity, the so called “trade gravity model” permits to estimate countries’ bilateral trade potentials using a reduced form which comprises supply and demand factors (linked to countries’ dimensions and incomes proxied by total GDP and per capita GDP)⁷ as well as trade resistance (geographical distance, as a proxy of transport costs and “home biased” or “cultural unfamiliarity”) and trade preference factors (preferential trade agreements, common language and borders, etc.) (De Benedictis and Vicarelli, 2005). Thanks to its robust theoretical foundations⁸ based on the seminal works of Helpman and Krugman (1985); Bergstrand (1985) and Deardorff (1997), the gravity model has been traditionally used for the task of predicting the trade enhancing effect of countries’ integration. Thus, this model permits to estimate trade potentials using its estimated parameters as a benchmark of “natural” trade relations. The difference between the observed and predicted trade flows represents the unexhausted trade potential of the actual level of partner countries’ integration.

By the present gravity exercise, I deal with two main objectives: to get a measure of the magnitude of the actual unexploited trade in the context of the EU-MED partnership as well as give useful insights about the likely evolution of the potential trade within EU-MED partners’ countries after ENP and the EU-FTA came into force. A number of empirical estimations on EU-MED trade potentials have been already carried out by a number of scholars (see, for instance, Buigues and Martinez-Mongay, 2000; Ferragina et. al., 2005). However, while the above empirical works normally rely on “out-of-sample” trade potential estimates – i.e. parameters for highly integrated countries have been applied to project ‘natural’ trade relations between these benchmark countries and

⁷ The well known phenomenon that bigger countries trade more than smaller ones is captured by the coefficient associated to the total GDP while the “income effects” (i.e. richer countries trade more than poorer ones) is captured by the coefficient associated to per capita GDP. An equivalent formulation of the gravity equation is to consider the variable of total Population instead of per capita GDP. In this latter case, the coefficient associated to the population shows normally a negative sign.

⁸ Gravity model theoretical foundations have been derived both from the classical Heckscher-Ohlin theory of comparative advantage and from the new trade theories based on imperfect competition models. For a deeper analysis of the theoretical foundations of the gravity equation, see Montalbano (2004);

countries starting to integrate – this empirical exercise proposes “in-sample” trade potential estimates – i.e. countries at the beginning of the integration process are directly included in the regression analysis. Hence, while the previous empirical exercises rely on the strong assumption that trade integration patterns are homogeneous and obtain potential bilateral trade patterns of the less integrated countries using the same parameters of the more integrated ones, in this empirical exercise I obtained the actual values of the parameters of the EU-MED partnership and inferred that the residuals of the estimated equation represent the difference between “natural” and actual EU-MED trade relations. I therefore disregard the possible specification problems of the selected estimation technique⁹, by relying on the theoretical foundations of the applied gravity model reduced form as already discussed by several other studies (Evenett and Keller, 2002; Anderson and van Wincoop, 2003; Feenstra, 2004).

To this aim, I estimated the following gravity equation:

$$x_{ij} = \alpha + \beta_1 gdp_{it} + \beta_2 gdppc_{it} + \beta_3 gdp_{jt} + \beta_4 gdppc_{jt} + \beta_5 dist_{ij} + \beta_6 cb_{ij} + \beta_7 cl_{ij} + \beta_8 ec_{ij} + \varepsilon_{ijt}$$

where x_{ij} represents exports from country “i” towards country “j”; gdp_i , gdp_j , $gdppc_i$ e $gdppc_j$ represent, respectively, total and per capita GDPs of the export country “i” and the import country “j”; $dist_{ij}$ represents the geographical distance between the main economic centers of country “i” and “j”. cb_{ij} ; cl_{ij} and ec_{ij} are all dummy variables able to “catch” preferential trade linked, respectively, to the existence of a common border, language and the preferential trade granted by the membership in the European common market. All variables are in natural logs, except for the dummies. Dummy variables take a value of 1 in the presence of the related phenomena and 0 otherwise. Hence, the estimated gravity equation is a log-log equation characterized by the very interesting property that the estimated parameters can be interpreted as elasticities. The constant term of the gravity equation represents the impact of the world income on bilateral trade within the sample and permits to catch the effects of the increasing of the overall phenomenon of globalization in time and spatial comparisons¹⁰.

The present gravity regression pools together data on bilateral trade flows for 10 MPs (Algeria, Egypt, Jordan, Israel, Lebanon, Malta, Morocco, Syria, Tunisia, Turkey); 15 EU Member States (Austria, Belgium-Luxembourg, Denmark, France, Germany, Italy, Netherlands, Sweden, Finland, Greece, Ireland, Portugal, Spain, United Kingdom), Norway, Iceland and Switzerland. To bring the most information possible to bear at once, I pooled data across the cross-section and time-series dimensions for the entire period of the EU-MED partnership (1995-2004¹¹). The derived “potential trade” has been then compared to actual trade volumes to assess the dimension of unexploited trade within the Euro-Mediterranean Trade Partnership.

Bilateral trade flows and GDPs values have been taken in current US dollars in PPP (Purchasing Power Parity) to avoid distortions on the comparison of incomes induced

⁹ This strategy has been severely criticised by Egger (2002), who makes the potentially destructive remark that any large systematic difference between the observed and the in-sample predicted trade flows only indicates problems of misspecification in the econometric model. For a deeper analysis of this issue see also De Benedictis and Vicarelli (2005).

¹⁰ Generally speaking, the gravity estimates show a lower degree of openness than expected (see Frankel, 1997)

¹¹ Data for 2005 are not available yet.

by large temporary swings in the nominal exchange rate (Frankel, 1997)¹². The use of current figures of the monetary variables does not have any incidence on the model estimates, apart on the constant terms, thanks to the use of the log-log regression (i.e. price indexes enter linearly into the regression). Geographical distance has been measured, like in several previous studies, “as the crow flies”, using great circle distances¹³ among capital cities. A huge amount of literature has presented alternative measures of geographical distance in gravity estimates, especially with reference to the actual limit of the standard measures of taking into account of bilateral trade among provinces in different countries (Leamer, 1997; Wolf, 1997; Head and Mayer, 1998;). However, literature converges on the feasibility of this methodology if a variable for “common border” is also included to correct the likely underestimation of geographical distance.

In accordance with the gravity approach, export flows were expected to be positively influenced by: the size and the demand of the home and the host market (proxied by total and per capita GDPs); geographical and cultural closeness (proxied by the presence of a land border or a common language) and the presence of regional agreements. On the other hand, they were expected to be negatively correlated with the geographical distance of the host’s market, a proxy of trade costs, home bias and “cultural unfamiliarity”.

Indeed, in the preferred specification¹⁴, all the variables show the expected sign and are highly significant (see table 1).

The estimated coefficients for total and per capita GDPs are both positive. It indicates that, though trade increases with a country’s size, this increase is less than proportionately (holding constant per capita GDP) and that richer countries trade more than poorer ones. Moreover, the sum of the coefficient is closer to 1. This means that holding constant for population, trade between a pair of countries is proportionate to the product of their GDPs.

¹² Sources are for bilateral trade flows IMF, Direction of Trade Statistics database and for GDPs World Bank, World Development indicators.

¹³ The great-circle distance is the shortest distance between any two points on the surface of a sphere measured along a path on the surface of the sphere. Because spherical geometry is rather different from ordinary Euclidean geometry, the equations for distance take on a different form. In non-Euclidean geometry, straight lines are replaced with geodesics. Geodesics on the sphere are the great circles (circles on the sphere whose centers are coincident with the center of the sphere). Because the Earth is approximately spherical, the equations for great-circle distance are important for finding the shortest distance between points on the surface of the Earth, and so have important applications in navigation.

¹⁴ Because of the presence of time invariant dummies and the use of a limited sample of countries within the Pan-European Common Market (EU15 and MPs) I choose a random effects model. From an econometric point of view, the Hausman test rejects the null hypothesis of similarity in this case between fixed and random effect coefficients, arguing the presence of a systematic difference between the two. However, as Baltagi (2001) clearly states, this result does not imply necessarily the adoption of a fixed effect model without testing the validity of this restriction on the parameters.

Table 1 - Gravity model estimates of EU-MED trade (1995-2004)

| Explanatory variables | |
|---|------------------------|
| LnGDP <i>country i</i> [lngdpi] | 0.7715 (9.91)*** |
| Ln per-capita GDP _i [lngdppci] | 0.2183 (1.71)* |
| LnGDP <i>country j</i> [lngdpj] | 0.7187 (53.06)*** |
| Ln per-capita GDP _j [lngdppcj] | 0.3909 (17.61)*** |
| Ln Geographical distance [lndistij] | -0.9148 (27.53)*** |
| Common border [cbij] | 0.3082 (4.42)*** |
| Common language [clij] | 0.6904 (13.72)*** |
| European Community [ec] | 0.4536 (11.46)*** |
| Constant | -11.8521 (12.38)*** |
| F-test | [0.0000] |
| R ² | 0.87 |
| Hausman test | 26.54*** |
| N. of obs | 4489 |
| N. of groups | 27 |

Notes: Figures in parenthesis () are absolute t-ratios; figures in brackets [] are p-values. * indicates that a coefficient is significant at the 10% level; ** significant at the 5% level; *** significant at the 1% level.

The estimated coefficient for geographical distance is -0.91. It means that an increase of 1% of the geographical distance between partner countries is supposed to reduce bilateral trade almost proportionally. As above underlined, the value of this coefficient has to be analyzed in conjunction with the estimated “common border” effect. Dummy for common border shows that countries that share a common border are estimated to engage in 36% more trade than to otherwise similar countries (1,36 is the exponential value of 0,30)¹⁵. Very relevant is also the dummy for common language. Countries that share a common legacy are supposed to nearly double their bilateral trade flows (1,99 is the exponential value of 0,69). Finally, consistently with previous analyses (Baldwin, 1994; Frankel, 1997; Fidrmuc and Fidrmuc 2000) the dummy for European Common Market membership is also significant and relevant ($\exp(0.45)=1.57$).

Consistently with our first objective of testing the actual dimension of unexploited trade, I thus used the estimated coefficients to calculate an in-sample trade potential index (i.e. the ratio between the actual trade and potential trade or, in other words, trade

¹⁵ Because trade is specified in logarithmic form, the way to interpret the coefficient on a dummy variable is to take the exponent.

estimated as normal) for EU-15 and MPs for the period 1995-2004. A ratio of one suggests that actual trade equals potential trade. The lower is the ratio, the higher the gap to be filled and therefore the measure of unexploited trade in the context of the EU-MED partnership.

Fig. 6 shows the performance of this trade potential index for the main MPs as well as their trends over time to give an idea of the path followed by each single country to catch up its potential level. As shown by the figure, the gap between trade potential and actual trade is, generally speaking, high for the majority of MPs (the dimension of unexploited trade is large). The phenomenon of unexploited trade is widespread and particularly relevant in the case of Jordan, Lebanon, Egypt, Algeria, and Morocco. Partially relevant in the case of Syria and Tunisia. Less relevant in the case of Turkey and Israel.

To test the level of trade potentials after the ENP and the EU-MED FTA will take place, I measured the influence of changes in the explanatory variables on bilateral trade flows predictions for 2013. More specifically, I calculated the likely level of GDP and per capita GDP in 2013 assuming, consistently with currently available annual growth rates projections (EC, 2007), a 5,5% annual growth rate for MPs and 2,5% for EU-15, and assuming zero population growth for EU-15 and 2% for MPs. To take into consideration the effect of deep integration granted by ENP and the effects of the new EU-MED FTA I also extended the effect of trade preferences granted by the full participation at the European Common Market (“ec” dummy) to all the MPs.

Table 2 shows the projected annual growth rates of exports for each country towards all its counterparts for the period 2007-2013 (i.e. the same period envisaged by the ENPI to carry out its planned activities). Also in the optimistic view of a full participation of MPs in the European Common Market the projected growth rates are not very high on average. However, it seems that the main improvements have to be expected in the case of South-South integration. Most of MPs shows projected annual rates of growth of nearly 2% in their bilateral exports. At the same time, the projections underline that there is more room left for EU exports towards MPs than the opposite. Actually, the low level of income growth of EU member States reduces MPs’ benefits from trade integration within the Pan European Common Market. Moreover, the very slow pace of exports’ growth would limit the speed of converge of MPs to their potential trade volume, leaving the level of unexploited trade of the Mediterranean area particularly high also in the next future.

Fig. 6 – In sample trade potential index for selected MPs (1995-2004)

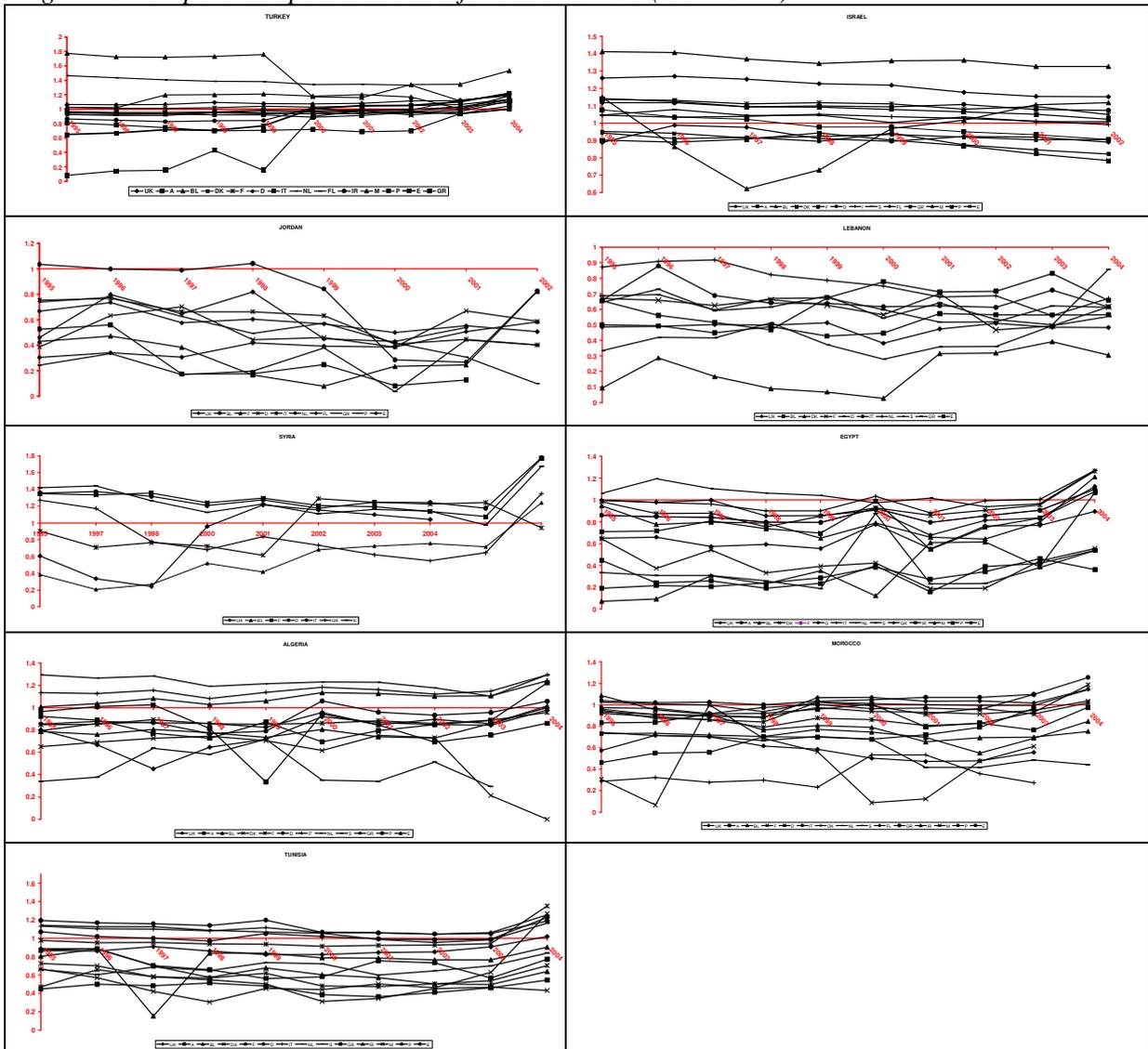


Table 2 – Projected export annual growth rates for the period 2007-2013

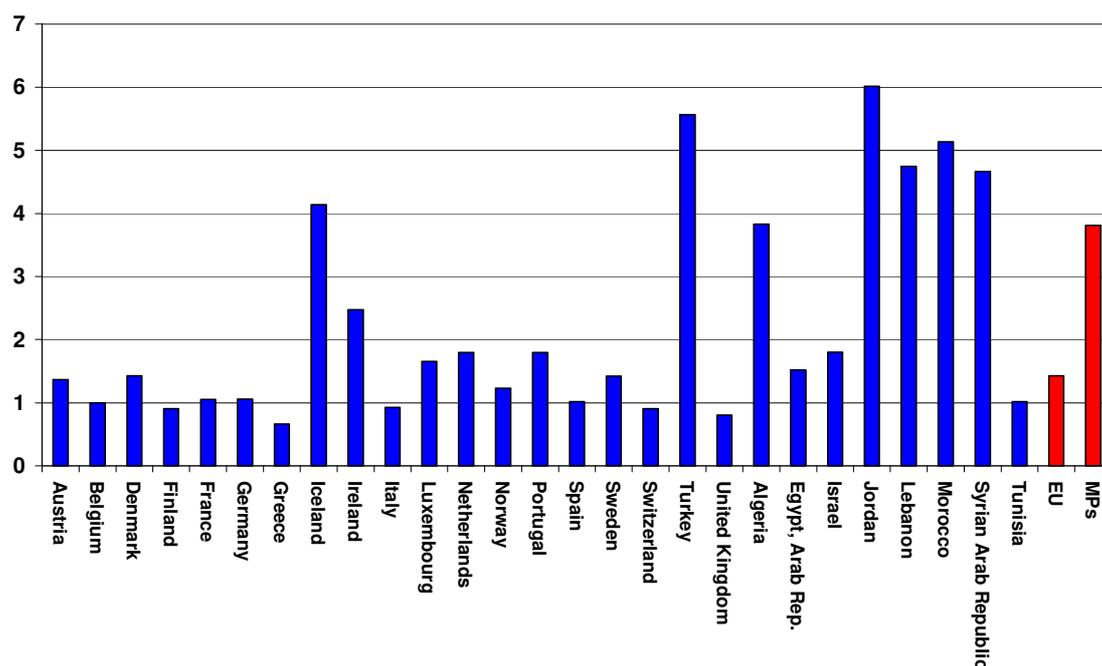
| COUNTRIES | PROJECTED EXPORT GROWTH RATES 2013 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|------------------------------------|---------|----------|---------|--------|---------|-------|-------------|--------|--------|-------------|---------|--------|---------|---------|-------|----------|-------|--------|--------|--------|---------|-------|-------|---------|---------|---------|--|
| | United Kingdom | Austria | Belg/Lux | Denmark | France | Germany | Italy | Netherlands | Norway | Sweden | Switzerland | Finland | Greece | Iceland | Ireland | Malta | Portugal | Spain | Turkey | Israel | Jordan | Lebanon | Syria | Egypt | Algeria | Morocco | Tunisia | |
| United Kingdom | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Austria | 1.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Belg/Lux | 1.9 | 1.7 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Denmark | 1.7 | 1.6 | 1.6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| France | 2.0 | 1.7 | 2.1 | 1.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| Germany | 2.0 | 2.1 | 1.9 | 1.9 | 2.0 | | | | | | | | | | | | | | | | | | | | | | | |
| Italy | 1.9 | 1.8 | 1.7 | 1.7 | 1.9 | 1.9 | | | | | | | | | | | | | | | | | | | | | | |
| Netherlands | 1.9 | 1.6 | 1.9 | 1.6 | 1.8 | 1.9 | 1.7 | | | | | | | | | | | | | | | | | | | | | |
| Norway | 1.6 | 1.4 | 1.5 | 1.4 | 1.6 | 1.6 | 1.5 | 1.4 | | | | | | | | | | | | | | | | | | | | |
| Sweden | 1.7 | 1.5 | 1.5 | 1.6 | 1.7 | 1.8 | 1.7 | 1.6 | 1.5 | | | | | | | | | | | | | | | | | | | |
| Switzerland | 1.6 | 1.5 | 1.5 | 1.4 | 1.9 | 1.9 | 1.8 | 1.5 | 1.4 | 1.4 | | | | | | | | | | | | | | | | | | |
| Finland | 1.6 | 1.5 | 1.5 | 1.5 | 1.6 | 1.7 | 1.6 | 1.5 | 1.4 | 1.6 | 1.3 | | | | | | | | | | | | | | | | | |
| Greece | 1.6 | 1.5 | 1.4 | 1.4 | 1.6 | 1.6 | 1.6 | 1.5 | 1.2 | 1.4 | 1.3 | 1.3 | | | | | | | | | | | | | | | | |
| Iceland | 1.3 | 1.0 | 1.1 | 1.1 | 1.3 | 1.3 | 1.2 | 1.2 | 1.0 | 1.1 | 1.0 | 1.1 | 1.0 | | | | | | | | | | | | | | | |
| Ireland | 2.0 | 1.4 | 1.5 | 1.5 | 1.7 | 1.7 | 1.6 | 1.6 | 1.3 | 1.5 | 1.3 | 1.4 | 1.3 | 1.1 | | | | | | | | | | | | | | |
| Malta | 1.4 | 1.0 | 1.0 | 1.0 | 1.2 | 1.2 | 1.3 | 1.1 | 0.8 | 1.0 | 0.9 | 0.9 | 1.0 | 0.6 | 1.2 | | | | | | | | | | | | | |
| Portugal | 1.6 | 1.4 | 1.4 | 1.4 | 1.6 | 1.6 | 1.7 | 1.5 | 1.2 | 1.4 | 1.3 | 1.3 | 1.4 | 1.0 | 1.3 | 1.0 | | | | | | | | | | | | |
| Spain | 1.8 | 1.6 | 1.7 | 1.6 | 1.8 | 1.8 | 1.8 | 1.7 | 1.4 | 1.6 | 1.5 | 1.5 | 1.5 | 1.2 | 1.6 | 1.2 | 1.6 | | | | | | | | | | | |
| Turkey | 2.0 | 1.9 | 1.8 | 1.8 | 2.0 | 2.1 | 2.0 | 1.9 | 1.6 | 1.8 | 1.7 | 1.8 | 1.9 | 1.5 | 1.8 | 1.4 | 1.7 | 1.9 | | | | | | | | | | |
| Israel | 1.9 | 1.7 | 1.8 | 1.7 | 1.9 | 1.9 | 1.9 | 1.7 | 1.5 | 1.7 | 1.5 | 1.6 | 1.7 | 1.3 | 1.6 | 1.4 | 1.7 | 1.8 | 2.2 | | | | | | | | | |
| Jordan | 1.8 | 1.3 | 1.5 | 1.3 | 1.6 | 1.6 | 1.6 | 1.5 | - | - | 1.2 | 1.3 | 1.4 | - | 1.5 | - | 1.4 | 1.5 | 1.9 | 2.1 | - | | | | | | | |
| Lebanon | 1.8 | - | 1.7 | 1.4 | 1.8 | 1.7 | 1.6 | 1.5 | 1.2 | 1.5 | 1.5 | 1.3 | 1.5 | - | 1.6 | 1.3 | 1.4 | 1.5 | 1.8 | - | 1.7 | - | | | | | | |
| Syria | 1.6 | 1.4 | 1.4 | 1.4 | 1.6 | 1.6 | 1.6 | 1.6 | 1.3 | 1.4 | 1.3 | 1.4 | 1.4 | - | 1.3 | - | 1.3 | 1.5 | 2.1 | - | 2.0 | 2.1 | | | | | | |
| Egypt | 2.0 | 1.6 | 1.6 | 1.5 | 1.7 | 1.8 | 1.8 | 1.6 | 1.4 | 1.6 | 1.4 | 1.5 | 1.6 | 1.4 | 1.7 | 1.4 | 1.5 | 1.7 | 1.9 | 2.0 | 1.8 | 1.9 | 1.8 | | | | | |
| Algeria | 1.9 | 1.7 | 1.9 | 1.7 | 2.1 | 1.9 | 1.9 | 1.7 | 1.4 | 1.6 | 1.8 | 1.7 | 1.6 | - | 1.6 | 1.4 | 1.7 | 1.8 | 1.9 | - | 1.9 | 1.8 | 1.7 | 1.9 | | | | |
| Morocco | 1.7 | 1.5 | 1.8 | 1.5 | 2.0 | 1.7 | 1.7 | 1.6 | 1.3 | 1.5 | 1.6 | 1.4 | 1.5 | 1.3 | 1.5 | 1.1 | 1.5 | 1.7 | 1.8 | 1.9 | 1.5 | 1.7 | 1.6 | 1.8 | 2.0 | - | | |
| Tunisia | 1.7 | 1.5 | 1.7 | 1.5 | 1.9 | 1.7 | 1.8 | 1.6 | 1.3 | 1.5 | 1.6 | 1.4 | 1.5 | 1.2 | 1.4 | 1.2 | 1.6 | 1.6 | 1.8 | - | 1.5 | 1.7 | 1.6 | 1.8 | 2.0 | 1.7 | | |

Source: Author's elaboration based on the estimated coefficients from the gravity equation presented in table 1

3. Patterns of macrovolatility within the EU-MED partnership

As figure 7 shows, between 1995 and 2004, MPs experienced a higher degree of per capita consumption volatility compared to EU member States. This means that EU-MED partnership fails to attain its objective of reducing the degree of vulnerability of MPs. They, despite a moderate growth of GDP, reveal, generally speaking, a low ability to maintain a stable path of consumption and, thus, a lower level of socio-economic well-being. Among MPs, Turkey, Algeria, Jordan, Lebanon, Morocco and Syria are characterized by the highest degree of volatility.

Fig. 7 – Per capita consumption volatility in the EU-MED area (1995-2004)



Source: Author's elaboration on WDI (2006)

The literature on volatility represents actually the most important achievements on the role of covariate risks and macro shocks at the macro level. Concerning the effects of volatility on long term growth, while most of the literature on the effects of volatility suggests a positive relation between volatility and average growth, there is, in fact, growing evidence which suggests a negative link in the case of the developing countries. The main explanation here is that particularly high or low volatility – “extreme volatility” - could be considered, especially in developing context at the beginning of the process of economic liberalization, as a proxy of greater uncertainty that, in turn, lowers investments in physical and human capital, thereby reducing long-term growth (Ramey and Ramey 1995; Martin and Rogers 1997; Talvi and Vegh 2000; Easterly, Islam and Stiglitz 2001; Pallage and Robe 2003; Hnatkowska and Loayza 2004). The theoretical underpinnings for a negative effect of uncertainty on economic growth operate through conditions of risk aversion, aversion to bad outcomes, lumpiness, and irreversibility associated with the investment process. Under these conditions, uncertainty is likely to lead firms to under-invest or to invest in the “wrong”

projects (see Bertola and Caballero 1994). Some structural country characteristics are bound to worsen the impact of volatility and uncertainty on economic growth, such as a poor level of financial development, deficient rule of law, and procyclical fiscal policy, which usually accompanies large public indebtedness (see Caballero 2000). Moreover, empirical investigations increasingly show that those impacts are reinforced by incomplete markets, sovereign risk, divisive politics, inefficient taxation and weak financial market institutions – factors that affect particularly developing countries (Aizenman and Pinto, 2004).

Concerning the determinants of volatility, a number of authors underline the potential impact on volatility of external shocks linked to trade liberalization (Prasad and Gable 1997; Wolf, 2004; Hnatkovska and Loayza, 2004, Kose, 2002; Kose and Yi, 2003). In particular, in the case of emerging countries, they argue that an increasing trade interrelation among economies not only increases inequalities but could also cause an increased risk “hazard” (i.e. the combination of exogenous risk exposure and the endogenous characteristics of the unit of analysis) which, in turn, could be heading towards a path of underdevelopment. Hence, if markets are not working well, an increasing integration among economies, particularly among the least developed ones (which are characterized by weak infrastructures and fragile institutions), contributes to an environment more susceptible to negative externalities at the macro level (Dercon, 2001).

World Bank’s Handbook on macro volatility underlines as well that, empirically, a higher volatility of the terms of trade appears to be linked to a higher volatility of consumption growth (Aizenman and Pinto, 2004; Agénor, McDermott, and Prasad, 2000). In fact, while, generally speaking, greater openness allows better insulation against domestic demand shocks, trade openness accompanied by greater specialization, it may also lead to greater exposure to sectoral shocks, and enhance exposure to external demand and supply shocks. Openness also enhances the role of the real exchange rate, which in turn can act both as a stabilizing element and as a source of additional input volatility. The link between generic measures of openness and output volatility, in contrast, is less settled. While Razin and Rose (1994), looking at a nearly comprehensive sample, detect no robust effect, other studies have found a positive link between openness and output volatility.

Regarding specifically the European Common Market, recent studies (Montalbano et al. (2006) pointed out that the occurrence of external negative covariate shocks associated with trade liberalization implied long term negative effects on aggregate welfare of the CEECs, even in a context of long term growth. As Fig. 7 clearly shows it would be not surprisingly to get a similar result also in the case of MPs.

4. Conclusions

The present work aims at testing empirically the feasibility of the following expectations about ENP’s role: fostering trade volumes between MPs and EU member States and decreasing MPs’ vulnerability and macroeconomic instability of the region.

Gravity estimates show the existence of a large amount of unexploited trade in the context of the EU-MED partnership, especially in the case of MPs, and the slow pace of exports’ growth performance driven by ENP and EU-MED FTA project. These results

are linked to “optimistic” assumptions about the MPs GDP growth performances and trade integration (we simulated a full MPs’ integration within the Pan-European Common Market and no “trade diversion” effect towards CEECs)¹⁶. In addition, we do not take into account the additional effect of “trade diversion” linked to the fact that European regional integration is a second best of a wider process of multilateral integration. Actually, EU could not be considered the most efficient supplier in the world.

Moreover, notwithstanding the EU-MED partnership, during the last decade MPs showed a low ability to maintain a stable path of consumption and, thus, their level of socio-economic well-being. This is a very worrying signal. MPs seem do not have adequate tools and mechanisms able to mitigate and/or cope with the higher degree of openness induced by the EU-MED liberalization process. They will remain more exposed to the occurrence of the external negative covariate shocks, associated with trade liberalization, with a strong probability of long term negative effects in aggregate welfare, even in a context of positive growth.

Starting from the above results, we can conclude that the new partnership strategy, even though fundamental to enlarge the benefits of European integration towards its neighbors, does not seem to be a sufficient condition to improve trade performance within the EU-MED partnership or, in any case, to reduce their degree of vulnerability facing a more open economic environment. The risk is twofold: to overstretch the new policy’s assignments, reducing its actual ability to attain its main goals and, at the same time, to underestimate the role of a number of key issues and collateral policies which remain fundamental for the success of the EU-MED integration process, such as the role of regional South-South integration and the adoption of early warning mechanisms and preventive policies to reduce the probability of negative shocks induced by trade liberalization.

¹⁶ Indeed, a number of empirical works show the existence of a trade diversion effect in the Mediterranean caused by CEECs (see also Ferragina et, al, 2005).

References

- Agénor, P. R., C. McDermott, E. Prasad (2000). "Macroeconomic Fluctuations in Developing Countries." *World Bank Economic Review* 14 :251--85.
- Aizenman, J. and B. Pinto (2004), 'Managing Volatility and Crises: A Practitioner's Guide Overview, Draft Chapter', in World Bank (ed), *Managing Volatility and Crises: A Practitioner's Guide*, PREM Economic Policy, Managing Volatility Thematic Group.
- Anderson J.E. and van Wincoop E. (2003) Gravity with Gravitas: A Solution to the Border Puzzle, *American Economic Review*, 93, 1, 170–192;
- Baldwin R.E. (1994), *Towards an Integrated Europe*, CEPR, London;
- Barro, Sala-i-Martin (1995), *Economic Growth*, McGraw-Hill, Inv. Advanced Series in Economics;
- Baltagi (2001), *Econometric Analysis of Panel Data*, John Wiley & Sons, Ltd, Second Edition, New York;
- Bergstrand J. H. (1985), The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence, *Review of Economic Statistics*, 67;
- Bertola, G. and R. J. Caballero (1994), 'Cross Sectional Efficiency and Labor Hoarding in an Matching Model of Unemployment', *NBER Working Papers*, 4472.
- Buigues P., Martinez-Mongay C. (2000), *Trade Resistance and Global Competitiveness: The Cases of Egypt, Jordan, Morocco and Tunisia*, paper presented at the 7th Annual Conference of the Economic Research Forum, Amman, 26-29 October;
- Caballero, R. J. (2000), 'Macroeconomic Volatility in Latin America: A View and Three Case Studies', *Economia*, 1(1), 31–108.
- Collins S., Rodrik D. (1991), *Eastern Europe and the Soviet Union in the World Economy*, Institute for International Economics, Washington DC;
- De Benedictis L. and Vicarelli C. (2005), Trade Potentials in Gravity Panel Data Models, *Topics in Economic Analysis & Policy*, Volume 5, Issue 1 2005 Article 20;
- Deardoff A. (1997), "Determinants of Bilateral Trade: Does Gravity work in a Classical Word?", *The Regionalisation of the World Economy*, ed.Frankel J., University of Chicago Press;
- Del Sarto, R. A.; Schumacher T. (2005), From EMP to ENP : what's at stake with the European neighbourhood policy towards the southern Mediterranean?; *European Foreign Affairs Review*, v. 10, n. 1, Spring, p. [17]-38;
- Dercon S. (2001), 'Assessing vulnerability', World Bank working paper, August.
- Easterly W. R., R. Islam and J.E. Stiglitz (2001), 'Shaken and Stirred: Explaining Growth Volatility', The World Bank Annual Conference on Economic Development, Washington DC.
- Egger P. (2002) An Econometric View on Estimation of Gravity Models and the Calculation of Trade Potential, *The World Economy*, 25, 2, 297–312;
- Emerson (2004) *European Neighbourhood Policy: Strategy or Placebo?*, Centre for European Policy Studies, n. 215, November;
- European Commission (2007), Directorate-General For Economic and Financial Affairs, Interim forecast, February;
- Evenett S. and Keller W. (2002) On Theories Explaining the Success of the Gravity Model, *Journal of Political Economy*, 110, 281–316;
- Feenstra R.C. (2004) *Advanced International Trade: Theory and Evidence*, Princeton University Press, ch.3;
- Femise (2005), Report on the Euro-Mediterranean Partnership;
- Femise (2006), Report on the Euro-Mediterranean Partnership;
- Ferragina A., Giovanetti G. and Pastore F. (2005), *EU Actual and Potential Trade with Mediterranean and Central and Eastern European Countries. A Gravity Study*, paper presented at the 12th Annual Conference of the Economic Research Forum (ERF);
- Fidrmuc J. and Fidrmuc J. (2000), *Integration, Disintegration and Trade in Europe: Evolution of Trade relations during the 1990's*, Centre for European Integration Studies, Universität Bonn, Working Paper, B3;
- Frankel J. (1997), *Regional Trading Blocs in the World Economic System*, Institute for International Economics, Washington;
- Head K., Mayer T. (1998), *Non-Europe: The Magnitude and Causes of Market Fragmentation in the EU*, CEPR;
- Helpman E., Krugman P.R.(1985), *Market structure and Foreign Trade*. MIT Press, Cambridge MA;

- Hnatkoska, V. and N. Loayza (2004), 'Volatility and Growth', in World Bank (ed), Managing Volatility and Crises: A Practitioner's Guide, PREM Economic Policy, Managing Volatility Thematic Group.
- Kose, M. Ayhan, and K. Yi (2003), 'The Trade-Comovement Problem in International Macroeconomics', Federal Reserve Bank of New York, Staff Reports. 155.
- Kose, M.A. (2002), 'Explaining business cycles in small open economies', *Journal of International Economics*, 56, 299–327.
- Leamer E. (1997), "Access to Western Markets, and Eastern Effort Levels", in S. Zecchini, ed. Lessons from the Economic Transition: Central and Eastern Europe in the 1990s, Dordrecht; Boston, Kluwer Academic Publishers;
- Martin, P. and C.A. Rogers (1997), 'Stabilization policy, learning-by-doing and economic growth', *Oxford Economic Papers*, 49 (1), 152–166.
- Milcher S. (2007), *The Economic Rational of the European Neighborhood Policy* (mimeo);
- Montalbano (2003), "Analisi dei Flussi Potenziali di Interscambio Commerciale nel Mercato Comune Paneuropeo", *PAGRI - 2/2003*;
- Montalbano (2004), *L'approccio di gravità: un modello eclettico di economia internazionale*, Dipartimento di Teoria Economica e Metodi Quantitativi per le Scelte Politiche, Quaderno n. 28;
- Montalbano P. et al. (2006), "Trade Openness and Vulnerability in Central and Eastern Europe" in Machiko Nissanke and Erik Thorbecke (eds) *The Impact of Globalization on the World's Poor: Transmission Mechanisms*; Palgrave;
- Nenci S. (2003), "Il ruolo delle riforme nei processi di integrazione regionale: il caso dei PECO" , *PAGRI - 2/2003*, 61-76
- Pallage, S. and M.A. Robe (2003), 'On the Welfare Cost of Economic Fluctuations in Developing Countries', *International Economic Review*, 44 (2), 677–698.
- Prasad, E.S and A.J. Gable (1997), 'International Evidence on the Determinants of Trade Dynamics', *IMF Staff Papers*, 45 (3), 401–439.
- Ramey, G and V. Ramey (1995), 'Cross-Country Evidence on the Link between Volatility and Growth', *American Economic Review*, 85 (5).
- Razin Assaf, Efraim Sadka and Tarek Coury (2003), 'Trade Openness, Investment Instability, and Terms-of-Trade Volatility', *Journal of International Economics*, 61, 285–306.
- Talvi, E. and C.A. Vegh (2000), 'Tax base variability and procyclical fiscal policy', *NBER Working Paper*, 7499.
- Wang Z., Winters L.A. (1991), *The trading potential of Eastern Europe*, CEPR Discussion Paper 610;
- Wolf H. (1997), "Patterns of Intra and Inter State Trade", in *National Bureau of Economic Research*, Working Paper n.5939;
- Wolf, H. (2004), 'Volatility: Definitions and Consequences', in World Bank (ed), Managing Volatility and Crises: A Practitioner's Guide, PREM Economic Policy, Managing Volatility Thematic Group.
- World Bank (2006), World Development Data;