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# Migration from Turkey and the Uncertainty of the Accession of Turkey to the EU

Demet Beton

Eastern Mediterranean University

Glenn Jenkins

Queen's University and Eastern Mediterranean University

Department of Economics

Queen's University

94 University Avenue

Kingston, Ontario, Canada

K7L 3N6

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# Migration from Turkey and the Uncertainty of the Accession of Turkey to the EU

By

Demet Beton  
Glenn P. Jenkins

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## **Abstract**

There is a fear that if Turkey were given admission to the EU massive migration to the other member countries of the EU would result. This paper develops a theoretical framework for the migration decision that takes into consideration the impact on uncertainty of some of the important economic and social variables that are addressed by the EU membership and institutions. It emphasizes future expectations of living conditions and the level of uncertainty associated with them as a key variable in making migration decisions. It suggests that the more prosperous and stable Turkey is expected to be in the future the less likely a person will now want to migrate. Hence, the greater certainty now that Turkey will gain admission in to EU, the more attractive is it for potential migrants to remain in Turkey. This framework suggests that measures to hinder Turkey's entry into the EU by having national referendums to approve its entry will increase the uncertainty of the future economic and social prospects in Turkey and will encourage migrants to migrate now to the member countries of the EU.

Keywords: Turkey, Migration, Uncertainty, Accession, European Union

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Demet Beton, Department of Economics, Eastern Mediterranean University, Northern Cyprus

Glenn P. Jenkins, Department of Economics, Queen's University, Canada and Eastern Mediterranean University, Northern Cyprus,  
Corresponding Author: [Jenkins@econ.queensu.ca](mailto:Jenkins@econ.queensu.ca)

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# MIGRATION FROM TURKEY AND THE ACCESSION OF TURKEY TO THE EU

## Introduction

Some people and some member governments of the EU fear that Turkey's accession to the EU could lead to a massive inflow of Turkish labour to the higher income countries of the union (Aydinli and Waxman, 2001; Martin, Midgley and Teitelbaum, 2001; Avci, 2002; Flam, 2003; Chislett, 2004; Grabbe, 2004; Casanova, 2006). The political response of such countries as France and Austria has been to erect additional barriers to Turkey's entry beyond its satisfying the conditions of the *acquis communautaire*<sup>1</sup>. In this paper we discuss how the migration decisions of potential Turkish migrants to EU member states are likely to be influenced by some of these political economy issues surrounding Turkey's accession process between now and the time when a final decision is made on Turkey's entry to the EU.

In particular we examine how these additional uncertainties will likely affect the migration decision of potential Turkish migrants.

## A Cost-Benefit Model of Migration with Uncertainty

From the early economic studies of migration (Sjaastad, 1962), the decision to migrate has been considered as an investment decision by individuals to increase the productivity of their human resources. As an investment, it involves initial costs and opportunity costs that are expected to be compensated over time by a better life in the place to which they migrated.

The private costs and returns of migration can be classified into two broad categories, monetary and non-monetary costs. Framing the decision to migrate in terms of a cost benefit analysis, the potential migrants are evaluating the welfare they would get over

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<sup>1</sup> The complete body of EU legislation. <http://en.euabc.com/word/12>

their lifetime, and perhaps their children's lifetimes, if they migrate. This situation is compared to the welfare they and their children would expect to have if they were not to migrate.

Following Parikh and Van Leuvensteijn (2003), the present value (PVB) of migrating is the difference in the expected utility stream that an individual obtains over her/his planning horizon if s/he remains in the home country, h, as compared to the expected utility stream s/he obtains if s/he migrate abroad, f. These utility streams will be a function not only of current income differentials between the home and the prospective host countries but also the future income differentials between these locations. These utilities are obtained from the total personal and social wealth in both locations,  $W^h$  and  $W^f$ , at each point in time, less the cost in utility arising from the direct costs of migration. This relationship can be expressed as;

$$NPV_m = PV[E[U(W^f)]] - PV[E[U(W^h)]] - PVC^m \quad (1)$$

where  $PVC^m$  denotes the present value of the direct costs of migration expressed in terms of utility. This gives us a decision criterion for migration. If the net present value of migrating,  $NPV_m$ , for the individual is positive, s/he should migrate, and if it is negative, s/he should stay in her/his home country.

We assume that the direct cost of migration, in terms of both expenditures and time, are known by the potential migrant with a high degree of certainty. These costs may include such items as the cost of obtaining visas and work permits, transportation and perhaps, the cost of learning a new language.

Most studies of migration, including those of Turkish migration to the EU countries, have introduced uncertainty and its associated costs into the analysis. Thus, uncertainty was thought to arise from the problem of finding suitable employment quickly in the destination country (Hatton, 1995; Bentivogli and Pagano, 1999; Fertig, 2001). In these and other studies the only the uncertainty facing the individual was the uncertainty they

would experience if they migrate. If they remain at home, the future is assumed to be known with certainty.

In this paper, we wish to consider the uncertainties facing a potential migrant in a much broader sense, both in the destination and in the home country. This uncertainty includes the conditions of the labour market that traditionally have been included as determinants of migration and also other areas of uncertainty that the EU institutions are specifically designed to address. These include such factors as political stability, macro-economic stability, financial market stability, security and human rights guarantees.

To capture these longer term uncertainty variables in a simple, but realistic, manner we first assume that the individual's utility function for a potential migrant is characterized by constant risk aversion with respect to the level of wealth. We continue this characterization of the individual's utility function with the assumption that these people will face threats to their wealth over time that follow a normal distribution whether they reside in their home or the foreign country. We describe the distribution of wealth outcomes from living in the home country as having a mean of  $\mu_{wh}$ , and variance of  $\sigma_{wh}^2$ .

Then the probability density function for wealth<sup>2</sup> is given by  $f(w) = \left(\frac{1}{\sqrt{2\pi}}\right)e^{-z^2/2}$ .

Where,  $z = [(w_h - \mu_{wh}) / \sigma_{wh}]$ .

Suppose these individuals have utility functions that can be expressed as an exponential of the individuals' wealth at any point in time;

$$U(W) = -e^{-AW}. \tag{2}$$

Where A is the individuals' risk aversion parameter that determines the size of the negative affects that the variability of wealth has on utility. This form of an individual

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<sup>2</sup> A derivation of these properties of a normal probability density function can be found in Nicholson, 2005, pp556)

utility function has been widely used in the economic literature (Levy and Markowitz, 1979). Given the assumption about the nature of the uncertainty of future wealth, the expected utility from his or her risky wealth at each point in time, if residing in the home country, can be expressed as;

$$E[U(W_h)] = \int_{-\infty}^{\infty} U(W_h) f(W_h) dW_h = \frac{1}{\sqrt{2\pi}} \int -e^{-AW_h} e^{-[W_h - \mu_{wh}]^2 / \sigma_{wh}^2} dW_h \quad (3)$$

Carrying out this integration and simplifying, equation (3) becomes;

$$E[U(W_h)] \cong \mu_{wh} - \frac{A}{2} * \sigma_{wh}^2 \quad (4)$$

Hence, the expected utility of an individual is expressed as a linear function of the two parameters of her wealth probability density function, the mean of the expected wealth,  $\mu_{wh}$ , and a cost of risk term,  $-\frac{A}{2} * \sigma_{wh}^2$ . The cost of risk term is a function of the variance of wealth and the individual's risk aversion parameter A. This parameter (A) determines the size of the negative effect of the variability of wealth on the expected utility of the person. The role that risk aversion plays in determining the decision to migrate has been explored by Parikh and Van Leuvensteijn (2003). Berger and Gabriel (1991) have also estimated the impact that risk aversion had on the type of jobs selected by immigrants and its ultimate effect on earnings.

An exact same form of the individual's utility function and the variables that determine utility can be used to describe the expected utility of the potential migrants if they in fact decide to migrate to the foreign country. These variables are denoted by subscript *f*. Hence, substituting equation (4) (for both the home and foreign locations) into equation (1), the present value of the difference in expected utility streams of an individual in the home country, h, and abroad, f, can be described as follows:

$$NPV_m = PV[\mu_{wf} - \frac{A}{2} * \sigma_{wf}^2] - PV[\mu_{wh} - \frac{A}{2} * \sigma_{wh}^2] - PVC^m \quad (5)$$

Rearranging (5);

$$NPV_m = PV(\mu_{wf} - \mu_{wh}) - \frac{A}{2} PV(\sigma_{wf}^2 - \sigma_{wh}^2) - PVC^m \quad (6)$$

The decision of a potential migrant depends on the expected net present value of differences between the expected wealth from living in the home and in the foreign country, and the differences in the variances of wealth that the potential migrant faces in both the home and destination countries adjusted by the individual's risk aversion parameter (A). Finally there are the direct costs associated with migrating. If these specific costs of migration are known with certainty and, given the form of the utility function, their present value in monetary units can be just subtracted from equation (6). A potential migrant will decide to migrate if the expected net present value of migration,  $NPV_m$ , over her/his planning horizon is positive.

If the size of expected wealth,  $\mu_{wh}$ , from living in the home country increases, other things remaining the same, the size of  $NPV_m$  decreases leading to an decrease in the incentive for the person to migrate. If only the uncertainty about the future living conditions in the home country increases, then we would expect that the variance of the wealth in the home country would increase for a potential migrant, leading to an increase in the incentive to migrate. Finally, the higher are the costs associated with migration,  $PVC^m$ , the lower will be the incentive to migrate.

An individual will find it more attractive to migrate to the foreign country the greater is the difference between the mean values of the expected wealth in the foreign country and that of the home country. Likewise, the attraction to migrate is greater, the smaller is the variance of wealth in the foreign country as compared to that of the home country. Of course it is the combination of both the effects of the differences in the expected values of

wealth in both locations, offset by the differences in the variances of wealth (cost of uncertainty) in the two locations that determine the present value of the migration decision.

Formulating the determinants of migration in this way, the decision to migrate is based on the expectations of the utility they expect to enjoy if they remain in the home country relative to what they expect to enjoy if they migrate. Of course, the actual number of people who migrate for a given PV of benefits will depend on the degree of migration restrictions imposed by the foreign countries on those wishing to migrate from any particular home country. Given any system of restrictions, however, it is reasonable to assume that the higher the expected  $NPV_m$  from migration, the large will be the numbers of determined, and successful, migrants who make the move. This framework can be used to analyze a number of migration phenomena that have taken place in recent years.

### **Applying Model to Explain Previous Intra-EU Migration Flows**

It was the view of some analysts studying European migration, prior to the entry of Greece (1981), Portugal and Spain (1986) into the EU, that massive migration flow from these countries to the higher income countries in EU would arise (Dustmann, Kasanova, Fertig, Preston, Schmidt, 2003; Chammartin Moreni-Fontes and Cantu-Bazaldua, 2004). To everyone's surprise, a massive influx of immigrants from Greece, Portugal and Spain did not occur after these countries joined EU.

This observation is entirely consistent with the model shown in equation (1). Entry into the EU for a country means an acceptance of a common code of conduct and the maintenance of a set of institutions whose objective is to reduce the uncertainty of living conditions, along with a strengthening of democratic political institutions within the member countries.

After becoming a member of EU, the variance of wealth,  $\sigma_{wh}^2$ , in the home country will be lowered, hence, the cost of uncertainty experienced by those living in the home



country, will be decreased. There will an increase the relative cost of uncertainty appreciated with migration as expressed by the second term of equation (6),  $-\frac{A}{2}PV(\sigma_{wf}^2 - \sigma_{wh}^2)$ . The result is a decrease in the expected net present value of the welfare from migration, hence reducing the incentive to migrate.

The entry of Greece, Portugal and Spain into the EU was accompanied by such a large reduction in the level of uncertainty for residents living in these countries. These countries had a history of civil wars, military coups, dictatorships and the suppression of human rights that was fresh in everyone's mind. The entry into the EU was believed by most to be the vehicle that would put these kinds of uncertainties behind them once and for all. As a consequence, the attractiveness of these countries increased for both the natives of the country as well as for other people who might consider residing in them. In fact, the increase in the attractiveness of living in Greece, Portugal and Spain was so large that after decades of out migration the number of migrant stock from those countries that were living in the other EU countries actually decreased after the entry of those countries into the EU (Zeiceva, 2003; Migration Information Source, Country Profiles; US Census Bureau International Data Base, 1950-2007).

There is a vast literature on the determinants of the convergence of per capita income across countries, and particularly within the EU (Nazul Islam, 2003). This research has largely focused on the variables affecting the first term in equation (6),  $PV(\mu_{wf} - \mu_{wh})$ , that reflect the differences in the expected value of income or wealth in the two or more regions or countries (Parikh and Van Leuvensteijn, 2003). Under normal circumstances the expectations about the convergence of the values of expected per capita income or wealth for a country aspiring to join the EU is likely to be formed well before the date of its actual entry. At the point of the actual entry date into the EU, there is likely to be a smaller change in the person's expectations about the mean values of expected wealth than will be the change in peoples' expectations about the variance in the value of their future wealth.

## **Applying Model to Explain Timing of Migration Flows from Hong Kong**

An illustration of the power of such uncertainties determining migration flows can be seen in the massive migrations that took place just prior to and after the decision for the political integration of Hong Kong into the People's Republic of China. The annual migration flow from Hong Kong between 1980 and 1986 remained stable at around 20,000 people per year. After 1986, migration out flows experienced a sharp increase to peak at 62,000 in 1990 (Skeldon, 1990). The primary destination countries were Australia, USA and Canada. The main reason for the increase in out migration was the uncertainty about Hong Kong's political and economic future following the agreement with UK in 1984 for the transfer of its sovereignty to the People's of Republic of China in 1997 (Li, 2003; Salaff, 2006; Sussman, 2005; Siu-lun, 1992). The uncertainty and the decrease in public confidence about the future were based on the fear of Hong Kong being turned into a communist state with limitations on individual rights of speech and private property (Li, 2003). Many potential migrants did not wait in Hong Kong to see how the situation would turn out, but begun to migrate as soon as the regime change became inevitable.

The structure of the migrants from Hong Kong to those countries predominantly consisted of the young, educated professionals and middle class businessmen (Li, 2003; Siu-lun, 1992). It was estimated, in 1989, that 48.8% of total migrant population were between the ages of 25 and 44 of the total migrant population. 14.5% had either a postgraduate degree or post graduate qualification, and 23.3% were employed as professionals or a technical, administrative, and managerial staff before they migrated. The young, educated professionals are the group who are likely to have the lowest relocation costs. On the other hand, it is the middle class businessmen who face the greatest uncertainty about the future after Hong Kong is absorbed into the People's Republic of China.

Studies have shown that many of the migrants did not improve their level of income by moving away from Hong Kong (Salaff, 2006). For many, the main objective of migration

was to escape from the higher level of uncertainty of the future economic and political environment in Hong Kong. Some moved their families, while the head of the household continued to work or maintain their business in Hong Kong.

After 1995, the flows of migration out of Hong Kong started to decrease. In addition to this decrease, as people became better informed over time of China's economic development policies there was a significant flow of return migration back to Hong Kong (Sussman, 2005). Many of those returned only after obtaining a new citizenship and often with homes purchased abroad. With these precautions in place, an easy exit from Hong Kong could be facilitated, should their worst fears about the future political system in Hong Kong be realized.

### **Turkish Migration to the EU**

The migration flows from Turkey to EU member states started during 1960s. Most of the migrants from Turkey went to Federal Germany starting in 1961 with the Guest Worker Agreement. Those flows accelerated after 1963 where the Ankara Agreement was signed between Turkey and European Economic Community. The number of Turkish population living in Germany was 6,800 at the end of 1961 but reached 712,300 by 1972 (Turkiye Isverenler Sendikasi Konfederasyonu, 2006).

The Government of Federal Germany decided to end the Agreement on Guest Workers in 1973 as a result of the economic crises it faced following the sudden increase in world oil prices. However, the number of Turkish living in Germany continued to increase between 1973 and 1983. An important factor was the German Government's decision to allow the Turkish workers to bring their wives and children under the age of eighteen to Germany. This reduced the uncertainty of the future for those migrating to Germany. This policy led to a change in the demographic structure of the Turkish population in Germany. In 1973, the Turkish population in Germany was around 910,500, mostly males. The number of Turkish females and children started to increase after 1974. By 1982, the Turkish

population in Germany increased to 1,580,700 (Turkiye Isverenler Sendikasi Konfederasyonu, 2006).

Migration became a controversial policy issue in Germany because of the social and political problems that accompanied the increase in Turkish and other foreign groups in Germany. The result was the Return Support Law of November 1983 legislated by German government (Eryilmaz, 2002). This law provided financial assistance to those who wished to return to Turkey and also it decreased the age limit to sixteen for the family reunification<sup>3</sup>. These policies created considerable uncertainty for the Turkish population in Germany. As a consequence, between 1983 and 1985, around 374,000 Turkish migrants turned back to Turkey. After 1986, the Turkish population in Germany started to increase again because of the instability of the social, politic and economic conditions in Turkey. This was further encouraged by the new German citizenship law of January 1991 that allowed long term resident permits for foreign workers in Germany (Turkiye Isverenler Sendikasi Konfederasyonu, 2006).

### **Migration and the Accession Process**

In this context, we turn to the anticipated impact of Turkey's EU accession process on the decisions of potential migrants during this period. One of the important benefits of EU membership is that its institutions are expected to stabilize the economic and political conditions of a country. To gain admission, Turkey will need to make progress in implementing the *acquis communautaire*, and solve a number of ethnic/political problems related to the Kurdish society living mostly in East part of Turkey. It will also need to define the role of the armed forces in the political life of the country within EU norms. This process is expected to take up to 15 years to reach a conclusion.

On both the economic and the political fronts, joining the EU should lower the level of uncertainty for residents of Turkey and improve the conditions for economic growth and

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<sup>3</sup> According to the return support law, if the requirements were met, in addition to 1,500 DM for each child, 10,500 DM would be paid to the foreigners who turn back to their country and also the retirement premiums paid by those workers would be repaid immediately.

the strengthening of democratic institutions. In terms of our migration model, equation 6, if the accession process were to proceed smoothly then the expected variance of the wealth for an individual or family living in Turkey,  $\sigma_{wh}^2$ , would fall. This reduces the attractiveness of migrating in the period before Turkey is admitted to the EU and also after it is admitted. Not only is the per capita income for Turkey expected to converge toward that of the other EU countries, but also the prospect of entering the EU would reduce the expected variance of wealth, hence, the utility from staying in Turkey increases.

In terms of the expected income in the future, a potential migrant would enjoy if s/he stayed in Turkey, the final admission of Turkey into the political union of the EU might not be very large. The major impact on expected income is likely to have come about due to implementation of the reforms and the development of the institutions needed to gain admission. However, the final act of entry in the EU requires a legal agreement by the country to abide by a set of rules governing economic and political policies that may have a much larger impact at the time of accession on the anticipated variance of the future wellbeing of its residents than it will have on the expected values of such economic indicators as per capita income. A law does not become a law until it is implemented. Hence, the level of uncertainty can be changed dramatically with the enactment of the law. Economic conditions are built up over time and hence expectations about future levels of income are more difficult to influence in the short term by a single policy action.

This dampening effect on the level of uncertainty experienced by potential Turkish migrants within the period of accession is greatly affected by the process by which the final decision is made for Turkey's admission to the EU. According to the EU rules, if any member country conducts a referendum and the majority of the voters say no to Turkey's admission, then Turkey will be denied admission to EU. This will be the verdict on accession even if it has fulfilled all the requirements of the *acquis communautaire*.

The decision making process of potential Turkish migrants concerning what they can expect if they remain in Turkey will be shaped according to the probability of the

member states voting either ‘yes’ or ‘no’. Let us begin by making the assumption that if Turkey were to satisfy all the conditions of the *acquis communautaire* then after being recommended by the officials of the EU the legislatures of the individual countries would be certain to vote in favour of Turkey’s admission into the EU. In this circumstance, there would be only two conditions that the potential migrant must evaluate for the future situation of Turkey. One is the situation where Turkey meets all the conditions of the *acquis communautaire*, and by assumption, becomes a member of the EU. We denote  $\mu_{wh}^e$  as the mean of the expected wealth and  $-\frac{A}{2} * \sigma_{wh}^{e2}$  the term measuring the cost of the future uncertainty of wealth in this state. The benefits in terms of utility that a potential migrant would receive if s/he remained in Turkey would be,  $PV(\mu_{wh}^{ve} - \frac{A}{2} * \sigma_{wh}^{ve2})$ . The second condition occurs if Turkey fails to fulfil *acquis communautaire* and can not be a member state of EU. The benefits derived from living in Turkey under the second condition are given by  $PV(\mu_{wh} - \frac{A}{2} * \sigma_{wh}^2)$ . Suppose the probability of Turkey being able to fulfil the obligations of the *acquis communautaire* is  $\pi^4$ , and the probability of not being able to fulfil the *acquis communautaire* is  $(1 - \pi)$ . In the latter case, Turkey is not able to become a member state of the EU. With these possibilities the net present value of the utility expected by a potential migrant from the act of migration from Turkey to EU during the accession period can be expressed as,

$$\begin{aligned}
 PVB = & PV[\mu_{wf} - \frac{A}{2} * \sigma_{wf}^2] - \pi[PV(\mu_{wh}^{ve} - \frac{A}{2} * \sigma_{wh}^{ve2})] \\
 & - (1 - \pi)[PV(\mu_{wh} - \frac{A}{2} * \sigma_{wh}^2)] - PVC^m
 \end{aligned} \tag{7}$$

Given that the objective of the *acquis communautaire* is to increase the social and economic well being of the residents of the EU, we would expect that in the same manner as Parikh and Van Leuvensteijn (2003) viewed the prospective convergence of incomes

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<sup>4</sup>  $\pi$  is assumed to be less than 1.

on East and West Germany, a convergence of incomes would take place over time between Turkey and the rest of the EU. The result of successfully fulfilling the conditions should cause  $\mu_{Wh}^{ve}$  to be larger than  $\mu_{Wh}$ , while given the history of Turkey  $\sigma_{Wh}^{ve2}$  would be expected to be less than  $\sigma_{Wh}^2$ . From equation 7, it can be seen that the net present value from migration to the EU will increase if the probability of Turkey fulfilling the *acquis* and becoming a member state of the EU,  $\pi$ , decreases.

Another cause of uncertainty to be considered is the uncertainty surrounding the process of Turkey's accession to EU membership. Even if Turkey fulfils the *acquis communautaire*, she still might not be able to become a member state of the EU if a referendum is held in a member country, such as France, and the "no" votes gain the majority. In short, fulfilling the *acquis communautaire* is a necessary but not sufficient condition for Turkey to become a member state of the EU. However, if Turkey makes the policy changes for the implementation of the *acquis* then it is likely to enjoy a level of expected wealth that is higher than if it fails to implement the *acquis*. However, it is reasonable to assume that for a resident of Turkey, the expected future wealth would not be as high and the expected variance of future wealth would be greater if Turkey does not gain final approval to enter the EU than if it were given full membership. The status of implementing the *acquis*, but not gaining membership is close to what some of the leadership of EU countries have called privileged association status (Casanova, 2006).

The levels of utility of the three possible situations that a potential Turkish migrant needs to take into consideration when evaluating the benefits of remaining in Turkey (full admission, fulfilling the *acquis communautaire* but admission refused, no fulfilment of *acquis communautaire* and no admission) are likely to be ranked as follows:

$$[PV(\mu_{Wh}^{ve} - \frac{A}{2} * \sigma_{Wh}^{ve2})] > [PV(\mu_{Wh}^e - \frac{A}{2} * \sigma_{Wh}^{e2})] > [PV(\mu_{Wh} - \frac{A}{2} * \sigma_{Wh}^2)] \quad (8)$$

The benefit of implementing the *acquis communautaire* and gaining full membership in the EU is expressed by the first term within the brackets of expression (8). It would

provide the best prospects for the potential Turkish migrant if she stayed home, this would be followed by the situation where Turkey was able to implement the *acquis communautaire* but was not able to get admission to the EU, which is denoted by the middle term. The worst situation, as expressed by the right hand term, would arise if Turkey was unable to implement the *acquis communautaire*.

If we denote the probability of France accepting Turkey's EU membership as a result of the referendum, given that the referendum will be held after Turkey fulfils the *acquis communautaire*, as  $\rho$ , the probability of France vetoing Turkey's EU membership, after Turkey fulfils the *acquis communautaire* is therefore expressed as  $(1 - \rho)$ . Now the present value of migrating for a potential Turkish migrant becomes,

$$\begin{aligned}
 NPV_m = & PV[\mu_{wf} - \frac{A}{2} * \sigma_{wf}^2] - \pi * \rho [PV(\mu_{wh}^{ve} - \frac{A}{2} * \sigma_{wh}^{ve2})] \\
 & - \pi * (1 - \rho) [PV(\mu_{wh}^e - \frac{A}{2} * \sigma_{wh}^{e2})] - (1 - \pi) [PV(\mu_{wh} - \frac{A}{2} * \sigma_{wh}^2)] - PVC^m
 \end{aligned} \tag{9}$$

Considering equation 9, when France or another member country holds a referendum the perceived probability is  $\rho < 1$  that the vote will be "yes". In this case a higher present value of value is obtained from migration than for the case if the referendum were not being held and the entry into the EU were determined solely by Turkey's ability to fully implement the *acquis communautaire*. The change in the expected NPV from migration due to the use of referenda,

$$\text{Change}NPV_m = \pi(1 - \rho) ([PV(\mu_{wh}^{ve} - \frac{A}{2} * \sigma_{wh}^{ve2})] - [PV(\mu_{wh}^e - \frac{A}{2} * \sigma_{wh}^{e2})]) \tag{10}$$

Equation 10 shows that if it is perceived that life would better for residents of Turkey if it were a full member of the EU than with some sort of special association status, i.e.

$$[PV(\mu_{wh}^{ve} - \frac{A}{2} * \sigma_{wh}^{ve2})] > [PV(\mu_{wh}^e - \frac{A}{2} * \sigma_{wh}^{e2})],$$

the use of a system of referenda to determine Turkey's final status will stimulate migration from Turkey during the accession period. In fact, the greater the number of EU countries that hold such



referenda, the greater will the incentive be for potential migrants from Turkey to try to migrate to the EU during the accession period<sup>5</sup>. The tendency to move forward the date of migration to before the final accession decision is made would be further strengthened by the fear that if Turkey does not gain admission then the EU would be likely to impose higher barriers on Turkish migration in the future. During the accession process the EU countries might be restrained in imposing higher barriers on migration from Turkey as it would be perceived badly by these voters in Turkey who want to enter the EU.

## **Conclusions**

The fear of massive migration from Turkey to the member countries of the EU, if it were to become a full member of the European Union, might be misplaced. From a model of migration that specifies the utility function of potential migrants as a function of the difference between their expected wealth in the foreign country and Turkey, as well as the difference between the expected variance of wealth in the home and foreign countries, this conclusion appears to be in error. The impact of EU membership on Turkish residents is to increase the relative wealth they will enjoy if they remain in Turkey and will reduce the differences in the costs of the uncertainty in terms of the variability of wealth from living abroad versus in Turkey. Both impacts will encourage potential migrants from Turkey to remain in Turkey rather than migrate.

A further implication of the model is that the efforts to restrict Turkey's entry to the EU through the use of national referenda will even make the problem of Turkish migration to the EU worse, particularly during the accession period. Unless the EU were to impose increased barriers to Turkish migration, then the increased uncertainty of accession that such mechanisms create will encourage potential migrants to migrate now to the EU rather than remain in Turkey. The expected value of living of the benefit from the improved conditions in Turkey that would result from Turkey's attempt to gain entry into the EU is decreased.

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<sup>5</sup> This statement will only strictly hold if the referendum outcomes are independent of each other.

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