



Munich Personal RePEc Archive

**CULTURE AND MIGRATION: A  
TALE ABOUT FEAR AND HOPE  
(WITH AN EMPIRICAL ANALYSIS  
ON EUROPEAN UNION CASE)**

Talpos, Ioan and Dima, Bogdan and Mutascu, Mihai and  
Enache, Cosmin

West University of Timisoara

20 January 2008

Online at <https://mpra.ub.uni-muenchen.de/7746/>

MPRA Paper No. 7746, posted 13 Mar 2008 23:51 UTC

# CULTURE AND MIGRATION: A TALE ABOUT FEAR AND HOPE (WITH AN EMPIRICAL ANALYSIS ON EUROPEAN UNION CASE)

By Ioan Talpoș, Bogdan Dima, Mihai Mutașcu and Cosmin Enache<sup>1</sup>

## Abstract

*The human movements across borders, societies and cultures are not running in an “empty space”: the structural characteristics of the economic systems, the institutional architecture of societies, the cultural paradigm and the power relations between different social groups, define the magnitude and the limits of such movements.*

*If the “hard” economic migration determinants are extensively explained in an abundant literature, the “soft” psychological/cultural determinants of “leave your old life” decision are less analyzed. This paper advances a model for the interactions between these factors and the economic ones and tries to explain their influences.*

*The main output consists in the thesis that the “soft” variables matters in a extended explanation of migration and that their exclusion picture a too abstract analysis of intrinsic migration motifs.*

**JEL Codes:** C33, F22

**Key words:** labor net migration, factors, cultural paradigm,

## 1. Introduction

International labor force migration is driven by a set of key factors. Even if the economic factors have a big influence on labor force migration, they are not the only ones. Recalling that according to DATTA [2004], the factors that are influencing in most significant way the labor force migration are the economic, demographical, social, political, and geographical ones, we appreciate that is needed to take into account the influence of the **cultural factors** as well.

1. *The economic factors* include the circumstances that determine the individuals to leave their country of residence. Among these, we mentioned instability and the economic recession,

---

<sup>1</sup> West University of Timișoara (Romania), Faculty of Economics, Finance Department, Address: 16 Pestalozzi Street, Timisoara, 300115, Romania, E-mail addresses: [ioan.talpos@fse.uvt.ro](mailto:ioan.talpos@fse.uvt.ro), [bogdan.dima@fse.uvt.ro](mailto:bogdan.dima@fse.uvt.ro), [bogdandima2001@gmail.com](mailto:bogdandima2001@gmail.com), [mihai.mutasclu@fse.uvt.ro](mailto:mihai.mutasclu@fse.uvt.ro), [mihai.mutasclu@gmail.com](mailto:mihai.mutasclu@gmail.com), [cosmin.enache@fse.uvt.ro](mailto:cosmin.enache@fse.uvt.ro)

poverty, lack of jobs, low living standards, violation of private property, and poor industrialization.

2. *The demographical factors* are regarding the population mobility. On the one hand, this is due to high density of population in residential areas (the migration is stronger as in the origin countries the density of population is higher). On the other hand, this is due to the natural changes in the structure of population, because an ageing population causes a decrease in the migration.

3. *The social factors* determine the population migration because of some elements regarding the instruction, the professional education, the competences and abilities, the marital status, the social security, the religion, the social harmony, and the idea of assuring the unity of the family.

4. *The political factors* have, in essence, some components as the political instability, the terrorism, the attitude of the political leaders and politicians in general, the tyranny of the majority through oppressive actions, the violations of democratic rights and public political opinions, the political intolerance, the xenophobia, and the violation of the mass-media freedom.

5. *The geographical factors* are based on the fact of the migration phenomena is strongly correlated with the “geographical proximity”, that is that geographical areas favorable situated in the vicinity of the residence area (usually, the geographical factor action together with the others, having more a „stimulating” role).

## **2. Theoretical framework**

The determinants of migration form a complex web of “hard” and “soft” factors inter-correlated in complex ways. The human motivations to change their lives are rarely simple and could not be seen in a “one for all” framework.

For instance, the *human capital* literature tends to treat migration as an investment. A typical position could be find as example in XIDEAS [2003; p.151]: “Migration takes place as a result of individual seeking to maximize their utility which is functionally related to the expected present value of income (pecuniary and psychic), the discount period usually taken to be migrant’s working lifetime”.

But this sounds a little bit like “Hamlet without the prince of Denmark”. Indeed, as the “hard” economic factors were analyzed in a large number of studies, less attention was paid to the “psychic” motivations for the migration. Or, the decision to migrate implies a radical change of life style and a major psychological adjustment to adapt the individual behavioral pattern to a new social environment. So that, there could not be so simply to say that rational subjects simply migrate to reach a positive utility differential at least without understanding by “utility” not only the material benefits but also a feasible socio-cultural environment<sup>2</sup>.

To start it is useful to take into account the distinction between the “voluntary” and “forced” migration. As DATTA [2004; p.346] notes: “Migration, any type, whether documented or undocumented, forced or voluntary can be explained in terms of push-pull factors (Datta, 1998). Push factors attribute to the negative characteristics operating at the center of origin whereas pull factors identify the positive characteristics (Datta, 2002) at the center of destination. There are essentially two types of migrants. One is due to persecution for various reasons, and the other is economic reasons. Persecution is essentially either for political or religious reasons. In such cases, the persons are given asylum to adopted country. Since, it would be inhuman to send them back. An economic migrant does not receive these privileges”.

It could be noticed in the framework of this distinction that only the “voluntary” migration situations are susceptible to be described in terms of complex psychological motivations *ex ante* formulated. In a “save the women and the children” situation the instinct to preserve its own life and integrity will dominate the individual reactions without any other more sophisticated considerations. Wars, natural disasters, political and religious persecutions, the lack of vital natural resources, social insecurity all these generates large human movements for which the “shelter motive” is prevailing.

In the mean time, the *individual* decisions to migrate could be more connected to economic factors. But even in these cases, different motivations should be distinguish in a more sensitive explanation. More exactly, at least two types of “soft” psychological migration determinants could be identified:

1. *The search for a high level of social benefits and*
2. *The search for better economic opportunities.*

---

<sup>2</sup> Of course, there could be “simply” added the “cost of social adaptation” in the utility definition as a formal variable but this still leaves the theory with the black box of an “empty” explanation.

The first motif is characteristic for “public rent seekers”. These social subjects are looking to maximize their utility function by migrating in the areas where they can benefit from a higher level and/or a more adequate structure of the public goods supply. It is convenient to view this in the light of “The consumer-voter may be viewed as picking that community which best satisfies his preference pattern for public goods” TIEBOUT [1956; p.418] definition. This component of migration tries to *passive* adjust the utility differential by choosing a habitat with higher first and second order social benefits. The psychological climate characteristic is dominated by a passive attitude toward life and/or by a *fear of the future* sentiment: these social subjects tend to reject the *performance stress* from their own society or they are feeling that these societies aren’t doing enough to secure their future.

The preferred target societies will be the *protective* ones with generous social system, tolerant, with good health, education and environment protection systems, with a “think to the future” time attitude and even less oriented to economic performance. A larger social and political unified till a certain degree space such as a union/ federacy/ confederacy one will facilitate the existence of a public rent differential encompassed between certain lower / upper borders enough larger to generate migration movements.

The second determinant acts for the *actives* subjects involved in migration. They are searching for better opportunities to find a job, to build a career, to develop a business, to achieve a higher social status. They are characterized by a *pro-active* attitude and the involved risks have a lower relative importance. As a consequence, they will prefer the highly developed societies, economic performance oriented, with well developed technological infrastructures, with a dense urban network, a large degree of economic freedom, individualistic and with a “here and now” time perception. A greater difference between origin and destination in terms of economic condition will tend to stimulate this type of migration.

Briefly, in the line of this argumentation it could be identified two models for the migration psychological determinants:

1. *Search for a peaceful village (SPV)* and, respectively,
2. *Search for the Promises Land (SPL)*.

Of course, there could not be in fact operate a clearly distinction between these two classes of migration motifs and frequently and in different combination the same subject could be affected by both of them. But for the sake of simplicity it could be considered that the *global* level of

migration is affected by their combination and such combination is a linear one. Such postulate has associated an analytical price but in our opinion does not affect the relevance of the derived results.

One critical issue for this framework consists in the fact that the individual subjective motives of migration should be aggregate by a translation from a micro to a macro scale: if individual migration could be explained also by psychological factors, the global migration could also be explained by *culture* as an aggregate of individual behavior models.

According to the “Merriam-Webster” dictionary, culture is “the act of developing by education, discipline, and social experience” or “training or refining of the moral and intellectual faculties”. In a different view, COZZI [1998], understand by culture a “social asset” whose acquisition by an agent generates no individual utility but has positive external effects. UNESCO] described culture as follows: “... culture should be regarded as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs”<sup>3</sup>.

Such definitions are more focused on the *static* aspects of the culture as a given social artifacts. But cultural characteristic are changing over time; the content of the shared intellectual products does not rest the same over long time spans. Societies are reacting to the variation of the external and internal environment. So that, a more comprehensive view of **cultural paradigm** admits that its architecture is “stable” only in a “short enough” time horizon.

In TALPOS *et al* [2005; p.20] we provide the next definition of the **paradigm**: “*Through paradigm we understand the dominant collective mental model that individualizes a society from another. This paradigm represents a societal integration factor, by offering common values and goals for the members of the society. Also, this represents the subject of some learning and inter-generational transmission process, which slowly modifies itself, in “long cycles”*”.

In other words, we consider *the cultural paradigm* as representing “something much more” than a set of “shared values”. This way, one could remark that an interesting definition for the culture as “shared values” is, for instance, the definition given in KROEBER and KLUCKHOHN [1952] (cited by ADLER [1986]). According to this, culture consist of patterns, explicit and implicit of and for behaviors acquired and transmitted by symbols, constituting the distinctive

---

<sup>3</sup> UNESCO - Universal Declaration on Cultural Diversity, 2002

achievement of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other as conditioning elements of future action.

Culture is:

- Something that is shared by all or almost all members of some social group;
  - Something that the older members of the group try to pass on to the younger members;
- and,
- Something (as in the case of morals, laws and customs) that shapes behavior, or structures one’s perception of the world.

Our vision is much closer to HOFSTEDE [1991] who defines culture as “the collective programming of the mind which distinguishes the members of one group or category of people from another”. Like him, we emphasize that culture is, at least partially, learned, and not only inherited.

The important point for the migration cultural approach is the fact that this implies accelerate learning process of new cultural values for the incoming human capital, on one hand, and could act as a stimulus/inhibitors mechanism for outgoing subjects. One could migrate in order to benefit from a better social security system or from a better job but still she / he have to adapt to pattern of social habits. Will she/he be accepted in the new community? Will she / he be able to communicate with his colleagues, neighbors and authorities in an efficient manner and in the respect of the new social games’ rules? And more important: will she/he be considered integrated or will find herself / himself in a “cultural ghetto”? In the mirror, is her / his culture an “open” or a “close” one? In other words, does the origin culture stimulates the risks taken process and facilitates the cultural accommodation? In this context, the *cultural discrepancy* between the origin and the destination will be directly connected with the volume and the structure of the migration.

With this features, we are starting with an compact model of the net migration rate between two social spaces  $i$  and  $j$  at a certain point in time  $t$ . Thus:

$$m_{i_t} = (\lambda_{1_{t_i}} - \lambda_{1_{t_j}})E_t(I_{i_t} - I_{j_t}) + (\lambda_{2_{t_i}} - \lambda_{2_{t_j}})E_t(C_{i_t} - C_{j_t}) + (\lambda_{3_{t_i}} - \lambda_{3_{t_j}})E_t(P_{i_t} - P_{j_t}) + E_t(\varepsilon_t) \quad (1)$$

where  $m_i$  is the net migration rate,  $I$  is an index of economic conditions and the degree of economic freedom,  $C$  is a set of cultural variables characteristics for the **paradigm**,  $P$  is the “net” ( without taxation) supply of public goods,  $\mathcal{E}$  is a “black box” which counts for the influence of other variables and  $\lambda_1 + \lambda_2 + \lambda_3 = 1$  are the relative sensitivity coefficients of net migration to these factors or defining the “excess” corresponding variables as

$$X_{i,j} = X_i - X_j$$

$$m_{i_t} = \lambda^{e_{1_t}} E_t(I_{i,j_t}) + \lambda^{e_{2_t}} E_t(C_{i,j_t}) + \lambda^{e_{3_t}} E_t(P_{i,j_t}) + E_t(\mathcal{E}_t) \quad (1)$$

We assuming that  $I_{i,j_t}$  can be written as

$$I_{i,j_t} = \sum_{l=0}^{\infty} \beta^{l_t} (u_{i,j_{t+l}} + \phi^{l_t} + \eta^{l_t}) \quad (2)$$

where  $u$  is an aggregate measure of local labor markets conditions (wages, unemployment, housing prices) and of business environments,  $\beta$  is a discount factor,  $\phi^{l_t}$  is a state effect that captures the role played by “fix” elements ( non-market barriers for the liberty of movements, legislation, bureaucracy, corruption, the degree of public authorities involvement in economic and social life), and  $\eta^{l_t}$  measures the “omitted” specific factors, such as tax rates, that can change over time<sup>4</sup>.

As a further step, we suppose that the expected future economic conditions could be predicted inside a *mix* mechanism by incorporating both past and current values<sup>5</sup>:

$$E(u_{i,j_{t+1}}) = c_{ll}(L)u_{i,j_t} + c_{lr}u_{i,j_t} \quad (3)$$

<sup>4</sup> Such a specification could hold if both spaces  $i, j$  maintain a non-zero population and the marginal migratory is ‘indifferent’ between staying or moving in any period. The idea is to avoid the complications that arise from the models with finite lifetimes.

<sup>5</sup> The adopted framework for the expectations derived from a *bounded rationality* approach in which the information is imperfect but is “completely” used by the social subjects.



where  $L$  is the lag operator.

Similarly,

$$P_{i, j_t} = \sum_{l=0}^{\infty} \beta_P^l \left( p_{i, j_{t+l}} + \phi^P p_{i, j} + \eta^P p_{i, j_{t+l}} \right) \quad (4)$$

where  $P$  is the level of public expenditures implying both economic and social transfers and

$\phi^P$  is the “fix” structure of public goods supply<sup>6</sup>, and

$$E \left( p_{i, j_{t+l}} \right) = c_{P_l} (L) p_{i, j_t} + c_{P^r} p_{i, j_t} \quad (5)$$

Since cultural variables adjust in “long cycle”, it is possible to consider under a “short enough” time period that:

$$E_t (C_{i, j_t}) \approx C_{i, j_t} \quad (6)$$

Finally, if  $\mathcal{E}$  is a random exogenous shock then

$$E_t (\varepsilon_t) = 0 \quad (7)$$

Relations (1.1) - (7) could be combined as in relation (8).

---

<sup>6</sup> The “non-shifting” hypothesis for this structure could be sustain until a certain point in a model of the “unified political agenda” in which the ideological differences does not play anymore a significant role; still there is a price in the realism of the model.

$$\begin{aligned}
m_{i_t} &= \lambda^e_{1_t} \left[ \sum_{l=0}^{\infty} \beta_I^l (c_{I_l}(L)u_{i,j_t} + c_I^r u_{i,j_t} + \phi^I_{i,j} + E(\eta^I_{i,j_{t+l}})) \right] + \\
&\lambda^e_{2_t} C_{i,j_t} + \lambda^e_{3_t} \left[ \sum_{l=0}^{\infty} \beta_P^l (c_{P_l}(L)p_{i,j_t} + c_P^r p_{i,j_t} + \phi^P_{i,j} + E(\eta^P_{i,j_{t+l}})) \right] \\
&= \lambda^e_{1_t} d_I(L)u_{i,j_t} + \frac{\lambda^e_{1_t} \phi^I_{i,j}}{1 - \beta_I} + \\
&+ \lambda^e_{1_t} \left[ \sum_{l=0}^{\infty} \beta_I^l (c_I^r u_{i,j_t} + E(\eta^I_{i,j_{t+l}})) \right] + \\
&+ \lambda^e_{2_t} C_{i,j_t} + \lambda^e_{3_t} d_P(L)p_{i,j_t} + \frac{\lambda^e_{3_t} \phi^P_{i,j}}{1 - \beta_P} + \\
&+ \lambda^e_{3_t} \left[ \sum_{l=0}^{\infty} \beta_P^l (c_P^r p_{i,j_t} + E(\eta^P_{i,j_{t+l}})) \right] = \\
&= \lambda^e_{1_t} A_{i,j_t} + \lambda^e_{2_t} C_{i,j_t} + \lambda^e_{3_t} B_{i,j_t} \\
&(8)
\end{aligned}$$

where

$$\begin{aligned}
d_{I,P}(L) &= \sum_{l=0}^{\infty} \beta^l_{I,P} c_{I,P_l}(L) \\
A_{i,j_t} &= d_I(L)u_{i,j_t} + \frac{\phi^I_{i,j}}{1 - \beta_I} + \\
&+ \left[ \sum_{l=0}^{\infty} \beta_I^l (c_I^r u_{i,j_t} + E(\eta^I_{i,j_{t+l}})) \right] \\
B_{i,j_t} &= d_P(L)p_{i,j_t} + \frac{\phi^P_{i,j}}{1 - \beta_P} + \\
&+ \left[ \sum_{l=0}^{\infty} \beta_P^l (c_P^r p_{i,j_t} + E(\eta^P_{i,j_{t+l}})) \right]
\end{aligned}$$

The  $A$  component of relation (8) stands for the *SPL* model of migration and the  $B$  component for the *SPV* one. The cultural variables differential  $C_{i,j}$  mediates the combined effects of these two set of migration motivational determinants.

According to relation (8):

- The space  $i$  will receive a net inflow of human resources as long as the economic (labor and business) environment conditions will provides relative greater opportunities comparing with space  $j$  and / or alternatively
- The level and / or structure of public goods supply will be relatively more attractive in space  $i$  in respect of space  $j$  in *caeteris paribus* conditions ( no major differences in non-market factors, legislation, taxation and public authorities involvement in socio-economic affairs);
- The cultural variables will amplify or reduce the cumulative effect of market status and supply of public goods in a non-linear manner.

An interesting particular case is represented by the situation in which  $i$  and  $j$  are components of an *economic and politic union* with a high degree of economic and financial integration but with autonomous fiscal policies. In such case, the market conditions will be uniform so that  $u \approx 0$  and relation (8) will become:

$$\begin{aligned}
m_{i_t} = & \frac{\lambda^e_{1_t} \phi^I_{i,j}}{1 - \beta_I} + \\
& + \lambda^e_{1_t} \left[ \sum_{l=0}^{\infty} \beta_I^l \left( E \left( \eta^I_{i,j_{t+l}} \right) \right) \right] + \\
& + \lambda^e_{2_t} C_{i,j_t} + \lambda^e_{3_t} d_P(L) p_{i,j_t} + \frac{\lambda^e_{3_t} \phi^P_{i,j}}{1 - \beta_P} + \\
& + \lambda^e_{3_t} \left[ \sum_{l=0}^{\infty} \beta_P^l \left( c_P^r p_{i,j_t} + E \left( \eta^P_{i,j_{t+l}} \right) \right) \right] \quad (9)
\end{aligned}$$

In other words, *the intra-union migration will take place as a global effect of non-market conditions, taxation and public goods supply level and structure via the cultural discrepancy between union members.*

### 3. An empirical analysis: the European Union migration case

Some of the conclusions derived from the theoretical framework described in the previous section could be directly tested.

The formal core model as an empirical form of relation (9) is:

$$Y_{it} = \alpha + \beta^1_t X^1_{it} + \beta^2_t X^2_t + \varepsilon_{it} \quad (10)$$

$Y_{it}$  is the net migration as the dependent variable. The  $\alpha$  parameter represents the overall constant in the model, while  $\varepsilon_{it}$  are the errors terms for  $i = 1, 2, \dots, M$  cross-sectional units observed for dated periods  $t = 1, 2, \dots, T$ . “1” and respectively “2” denotes the “cultural” and “public goods” explanatory variables.

In order to make such a model operational, the “cultural” variables were deduced from HOFSTEDE (1980)<sup>7</sup> in order to explain the cultural differences between the countries from the data analysis set (taking into account some limitation in their sphere and content). These variables are<sup>8</sup> :

- *Power Distance (PD)*;
- *Individualism (I)*;
- *Masculinity (M)*;
- *Uncertainty Avoidance (UAI)*.

The *PD* represents the acceptance degree by the members of society that the power (and all which could be associated with it) is unequal distributed. In a high power distance society, inequality is reckoned as natural, the power-relationships being the foundation of society.

---

<sup>7</sup> Realized in 1968-1973 starting from approximately 66 non-socialist countries, this study collected information from more than 117.000 forms, completed by the IBM employees in this countries

<sup>8</sup> For this analyzes purposes, the main advantage in using these factors is the quantification of the relevant elements, which could be used, in an empirical approach of the mentioned thesis. The factors interpretation realized here is larger that the one strictly derived from this study.

Therefore, to hold the power is essential, who hold it defining the content of the society's basic values.

*UAI* quantifies the tolerance degree accepted by the society's members for the anxiety induced by the ambiguous and unstructured future situations. The societies with high uncertainty avoidance are concerned on build-up some methods to minimized this anxieties. *Per a contrario*, the societies with a low level of uncertainty avoidance admit the fact that the risk and uncertainty belong to the real life, couldn't be totally avoided.

*I* measure the identity: communitarian or personal, respectively the relations established by the individuals with others members of the community. A collectivistic society (with a strong communitarian identity) valorizes the group, the collective space, which create a perception of a common propriety. An individualistic society valorized the own "ego", family, individual and private space.

*M* does not imply the discrimination of the cultural values on sexes; rather it reflects some fundamental values shared by all society members. More precisely, it is considered that the "masculine" societies are those where the dominant values are connected with the social affirmation, the material results and the decisional freedom. In this conditions the performance is measured using the terms of reaching and maintaining a reference social status and the material achievements are considered more important that the spiritual ones. Public services or educational system are oriented to performance.

These cultural variables could be combined in order to account for the mentioned models of migration. More exactly:

- If a society is a non-hierarchic one, is characterized by an intense *Masculinity* and displays a high level of *Individualism* with a low *Uncertainty Avoidance* then this society will be performance-oriented with a high horizontal and vertical level of social mobility. The search for better opportunities will dominate the social subjects decisions and the *Search for the Promises Land* model will prevail;

- If a society values the respect for authorities, is characterized by a continuous preoccupation for social welfare, inequality diminution and care for the marginal social categories and the communitarian attachment is strong and also risk assumption preferences are low then the concerns about the future will be intense among its members and the *Search for a peaceful village* model will be more important.

The supply of the “public goods” is explicitly approximated by the level of social protection public expenditures ( $SP$ ) in order to capture the “public rent seekers” movements. Still since this could not hold for the entire class of migration cases other connected variables are involved in an *instrumental* set. Such instrumental variables estimator is a straightforward extension of the standard **OLS** estimator. For example, in the simplest model, the OLS estimator may be written as:

$$\hat{\beta}_{OLS} = \left( \sum_i X_i' X_i \right)^{-1} \left( \sum_i X_i' Y_i \right) \quad (11)$$

while the corresponding instrumental variables estimator:

$$\hat{\beta}_{IVS} = \left( \sum_i X_i' P_{Z_i} X_i \right)^{-1} \left( \sum_i X_i' P_{Z_i} Y_i \right) \quad (12)$$

where  $P_{Z_i} = \left( Z_i (Z_i' Z_i)^{-1} Z_i' \right)$  is the orthogonal projection matrix onto the  $Z_i$  of instrumental variables.

It should be noticed the fact that the appeal to such variables is not only a “technical” issue but rather on it try to be consistent with the theoretical framework.

The set of the instrumental variables which were chosen includes the (lagged) values of:

net migration, cultural variables, the social expenses, the net national disposable income (which equals Gross National Disposable Income after subtracting consumption of fixed capital), the general expenses of the government, the defense and public order expenses, the resources associated with the public authorities involvement in the economic affairs, the environmental protection and housing and communities amenities, the health, education and recreation, culture and religion services provided by the central and local public authorities as well as a synthetically variable for the magnitude of state involvement in the social and economic life (*the Index of Economic Freedom*).

The design of this set tries to take into account:

- The inertial pattern of the migration induced the “pull-in” mechanisms of the previous movements in human resources;

- The opportunity to obtain supplementary incomes in the destination country as well as to benefit from a higher level of social benefits as this are recorded in the previous period;
  - The past structure of the public expenses and the nature of the public services provided at the central and local level with direct effect on *life quality*;
  - The state involvement in the socio-economic evolutions and the impact on the possibility to develop new business.

A final issue in the model specification concerns the treatment of the residual variables. The chosen method is a variant of the so-called *Panel Corrected Standard Error* (PCSE) methodology (Beck and Katz, 1995) and is robust to unrestricted unconditional variances  $\Omega_M$  but place additional restrictions on the conditional variance matrices. A sufficient (though not necessary) condition is that the conditional and unconditional variances are the same. More exactly it is a *Cross-section SUR* (PCSE) method with an estimate of the cross-section residual (contemporaneous) covariance matrix as:

$$\frac{N^*}{(N^* - K^*)} \left( \sum_t X_t' X_t \right)^{-1} \left( \sum_t X_t' \hat{\Omega}_M X_t \right) \left( \sum_i X_i' Y_i \right) \quad (13)$$

With these elements, the data analysis set includes the countries listed in Annex 1. In order to ensure the data homogeneity and to avoid the NA observations, the time span is between 1999 and 2004. The sources of data are Geert Hofstede™ Cultural Dimensions<sup>9</sup> and Eurostat - Statistical Office of the European Communities<sup>10</sup>.

The results are reported in Table A.1 from Annex 1. The level of DURBIN-WATSON statistic as well as the value of the sum of squared residuals confirms that there are some autocorrelations in residuals issues. Such conclusion is derived also from the pool unit roots tests residuals analysis in Table A.2. The tests grouped under three null hypothesis (“Unit root existence -assumes common unit root process”, “Unit root existence -assumes individual unit root process”, “No unit root”) tends to reveal the non-stationary nature of the residuals.

This problem could be address by explicitly incorporating into model as an explanatory variable the lagged value of the net migration but such an approach will leave open the “black-

<sup>9</sup> [http://www.geert-hofstede.com/hofstede\\_dimensions.php](http://www.geert-hofstede.com/hofstede_dimensions.php)

<sup>10</sup> <http://ept.eurostat.ec.europa.eu>

box” question: the migration process is an inertial one but is unclear in the adopted framework the nature of the mechanism which leads such a hysteretic behavior.

It could be noticed the fact that all the t-statistic are relevant with relatively low standard errors. According to these results:

- The most statistical relevant from the cultural is represented by the *Masculinity*: the societies more focused on performance and material achievements, with better urban and technological infrastructures, are receiving more emigrants that the societies with less emphasis in social performance;

- Surprising, the *Individualism* seems to be the weakest explanatory variable from the cultural one; still, the coefficients signs are the “correct” ones in the sense that the societies with a higher degree of social mobility, with strong valorization of the personal success and less attachment to communitarian values benefits more from the migration movements;

- The *Power Distance* does not play on inhibitor role for the migration; *per a contrario*, the accent on equity and equal chances for self-development tends to stimulate the migration;

- The “social anxiety” measured by *Uncertainty Avoidance* and the preference for a controlled by formal rules evolution of the social life limits the preferences for a country as destination point: the human resources has a relative preference for countries with less *social stress* and a lower level of social formal normalization;

- A higher level of social protection public services attract a higher degree of migration as it tends to stimulates the mobility of “public rent seekers” and to provides stronger incentives for stabilizing the autochthon labor force;

- The parameters signs are unchangeable and their levels and statistical significance does not significantly vary over the considered time period.

### **3. Comments and (auto) critics**

The results from the previous section are quite puzzling. On one hand, the image contoured by the cultural variables is consistent: *the preferred societies as migration targets are the individualist ones, highly oriented to social performance and vertical / horizontal human resource mobility*. On the other hand, the level and the structure of the public goods supply is significant important for a country capacity to attract a supplementary stock of human capital.



Of course, it could be argued that this means that *both* models of migration determinants stand with a different relative importance. But this does not really provide a way to discriminate among them and does not clarify the nature and the dynamic of their linkage. However, these results suggests that the relative weights of the *SPL* model is greater that the corresponding *SPV* one.

More generally, the proposed analysis is affected by some important limitations both at the theoretical as well as at the empirical level. Among these limitations, one could note:

**A) Theoretical “white spots”**

1) Culture and individual utility function: what is the connection?

The core argument of this paper is that the social subjects are not “perfect rational” so that they adopt their decisions (including the decision to migrate) also under the influence of a certain set of psychological factors. The aggregate reflection of such factors is “culture” so that the *global* level of migration will be affected by it. But such approach is more an *ex post* one since it implies two rounds of aggregation: one for individual migration decisions and one for the *subjective* variables. Even more no description of such aggregation mechanism is provided and is not clearly why a “synthetic” macro-view is possible.

2) How could be “culture” measured?

The appeal to the HOFSTEDE’s cultural variables could be criticized due to the fact that these have obviously a certain self-referential in the “occidental” culture and are not able to sustain a more accurate distinction between the characteristics of the cultural artifacts.

3) The baseline “soft” models of migration: how could be these discriminate?

In the paper is status that “there could not be in fact operate a clearly distinction between this two classes of migration motifs”. But if this is the case it means that also their determinants could not be clearly separated. Or the form of the relation (8) and the empirical findings suggests that in fact there is such a distinction but it could not auto-consistent emerge from the theoretical framework.

4) Where are the inter-generational mechanisms?

If “we emphasize that culture is, at least partially, learned, and not only inherited” than, at least on “long run” the relation (6) does not stands anymore and the model should provide a description for the adaptation mechanism at the level of the cultural variables. Even more, it

could be argued that the current migratory generation could benefit from past migrations so that  $C_{i,j}$  should be constructed as an auto-regressive variable.

5) Economic conditions: how are they described?

If  $u$  is an aggregate variable, then there should be: a) a list of its components which are susceptible to directly influence the migration process and b) an aggregation method focused especially on the particular weights estimation.

6) What kind of informational mechanisms?

If the differentials between “hard” and “soft” elements are used as explanatory variable then it should be assumed that the migration decision is taken in “completely” information about the origin and the destination countries condition. Or the paper states that the considered anticipation mechanism is derived from a *bounded rationality* model without clearly explaining the nature of such model.

7) What kind of social subjects migrates for a better level and structure of public goods supply?

The *SPV* migration model is viewed as a “cultural extension” of the TIEBOUT theorem but in fact is not explained such a connection. It appears that the reference to TIEBOUT is more a “self-insurance” and not an organic linkage.

**B) Empirical estimation problems**

Not only the theoretical but also the empirical part of the paper is affected by imperfect clarifications. Some of them are connected with:

- The stability of the models and the quality of the results (for instance, in terms of properties of the residuals variables);
- The identification problems for the involved parameters;
- The possible existence of non-linear interactions between the variables and the effects of such interactions;
- The insufficient number of observations and the absence of an explanation for the composition of the samples etc.

Despite all these *caveats*, we argue that the paper could be seen as a small breakdown into a usual yet manner to deal with the migration problems like they are isolated for their “subjective” aspects.

The human specie is not conducted in its fight for control over the natural and artificial environment only by “rational” motifs. Instead, the emotions could balance the logic and fear and hope twins could shape the individual and collective destiny “here” or in “The Promise Land”.

## Annex 1: Model estimation

### The Sample

Cross Section Identifiers	States
1	Belgium
2	Czech Republic
3	Denmark
4	Germany
6	Greece
8	France
9	Ireland
10	Italy
11	Cyprus
14	Luxembourg
16	Malta
17	Netherlands
18	Austria
20	Portugal
23	Finland
24	Sweden

**Table A.1.:** Pooled IV/Two-stage EGLS model estimation

*Dependent Variable: Net migration*  
*Method: Pooled IV/Two-stage EGLS (Cross-section weights)*  
*Sample (adjusted): 1999 2004*  
*Included observations: 6 after adjustments*  
*Cross-sections included: 17*  
*Total pool (balanced) observations: 102*  
*Linear estimation after one-step weighting matrix*  
*Cross-section SUR (PCSE) standard errors & covariance (no d.f. correction)*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-223.9648	13.80361	-16.22509	0.0000
PD--1999	1.212383	0.122509	9.896306	0.0000
PD--2000	1.820966	0.121026	15.04611	0.0000
PD--2001	2.884568	0.121588	23.72407	0.0000
PD--2002	2.796058	0.114783	24.35944	0.0000
PD--2003	2.837217	0.114074	24.87171	0.0000
PD--2004	1.643492	0.117737	13.95902	0.0000
I--1999	1.465281	0.114072	12.84528	0.0000
I--2000	1.745307	0.122071	14.29750	0.0000
I--2001	0.844540	0.113387	7.448304	0.0000
I--2002	1.400943	0.105413	13.29007	0.0000
I--2003	1.703915	0.106596	15.98476	0.0000
I--2004	1.550706	0.110568	14.02485	0.0000
M--1999	1.659919	0.030538	54.35607	0.0000
M--2000	1.553382	0.035730	43.47581	0.0000
M--2001	1.969874	0.031677	62.18529	0.0000
M--2002	1.883753	0.034109	55.22700	0.0000
M--2003	1.986079	0.037461	53.01773	0.0000
M--2004	2.386104	0.040297	59.21359	0.0000
UAI--1999	-0.173391	0.112636	-1.539395	0.1282
UAI--2000	-0.532202	0.112399	-4.734924	0.0000
UAI--2001	-1.332888	0.111750	-11.92745	0.0000
UAI--2002	-1.123308	0.105176	-10.68031	0.0000
UAI--2003	-1.132124	0.103963	-10.88969	0.0000
UAI--2004	-0.804441	0.106213	-7.573855	0.0000
SP--1999	3.516436	0.242192	14.51922	0.0000
SP--2000	2.812562	0.272293	10.32918	0.0000
SP--2001	5.515036	0.264334	20.86390	0.0000
SP--2002	3.604486	0.279731	12.88555	0.0000
SP--2003	2.381042	0.280515	8.488110	0.0000
SP--2004	3.203321	0.304274	10.52776	0.0000
<b>Weighted Statistics</b>				
<b>R-squared</b>	0.953836	<b>Mean dependent variable</b>	143.2167	
<b>Adjusted R-squared</b>	0.934330	<b>S.D. dependent variable</b>	272.9297	
<b>S.E. of regression</b>	69.94116	<b>Sum squared residuals</b>	347315.3	
<b>Durbin-Watson stat</b>	0.455487	<b>Instrument rank</b>	102.0000	
<b>Un-weighted Statistics</b>				
<b>R-squared</b>	0.298309	<b>Mean dependent variable</b>	59.57843	
<b>Sum squared residuals</b>	683650.2	<b>Durbin-Watson stat</b>	0.328451	

**Table A.2.:** Unit root tests for residuals

<i>Pool unit root test: Summary</i>				
<i>Sample: 1993 2004</i>				
<i>Series: Residuals</i>				
<i>Exogenous variables: Individual effects</i>				
<i>Automatic selection of maximum lags</i>				
<i>Automatic selection of lags based on MHQC: 0</i>				
<i>Newey-West bandwidth selection using Bartlett kernel</i>				
<i>Balanced observations for each test</i>				
<b>Method</b>	<b>Statistic</b>	<b>Prob.**</b>	<b>Cross-sections</b>	<b>Observation</b>
<i>Null: Unit root (assumes common unit root process)</i>				
Levin, Lin & Chu t*	-5.57276	0.0000	17	85
Breitung t-stat	1.20131	0.8852	17	68
<i>Null: Unit root (assumes individual unit root process)</i>				
Im, Pesaran and Shin W-stat	-0.31628	0.3759	17	85
ADF - Fisher Chi-square	37.3980	0.3158	17	85
PP - Fisher Chi-square	53.4849	0.0180	17	85
<i>Null: No unit root (assumes common unit root process)</i>				
Hadri Z-stat	5.20341	0.0000	17	102

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi - square distribution. All other tests assume asymptotic normality.

## References

1. Cozzi, Guido, (1998), *Culture as a Bubble*, Journal of Political Economy, 1998, vol. 106, no.2.
2. Datta, Pranati, (2004), *Push-Pull Factors of Undocumented Migration from Bangladesh to West Bengal: A Perception Study*, The Qualitative Report Volume No.9, 2 June.
3. Datta, Pranati, (2002), *Nepali migration to India*, Paper presented in the Regional Population Conference, South East Asia's Population in a changing Asian Context, organized by International Union for The Scientific Study of Population, Bangkok, Thailand.
4. Datta, Pranati, (1998), *Migration to India with special reference to Nepali migration*, Unpublished doctoral dissertation, University of Calcutta, Kolkata, West Bengal, India.
5. Hofstede, Geert, (2003), *Culture's Consequences, Comparing Values, Behaviors, Institutions, and Organizations Across Nations*, Sage Publications, Second Edition.
6. Hofstede, Geert, (1991), *Cultures and Organizations, Software of the Mind: Intercultural Cooperation and its Importance for Survival*, McGraw-Hill Book Company Europe.
7. Hofstede, Geert, (1980), *Culture's consequences: International differences in work-related values*, Newbury Park.
8. Tiebout, Charles, (1956), *A Pure Theory of Local Expenditures*, The Journal of Political Economy, 64(5).
9. Talpos, Ioan; Dima Bogdan; Mutascu Mihai; Enache Cosmin, (2005), *Agency, associations and culture: a tale of state and society*, Public choice society Annual Meeting, New Orleans, Louisiana, U.S.A., March 10-13.
10. Xideas Evangelos, (2003), *Modeling migration under uncertainty*, Aegean Working Papers Issue 1, December.