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in Romania





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About

Shortly after the end of the Kosovo war, the last of the Yugoslav dissolution wars, the Balkan Reconstruction Observatory was set up jointly by the Hellenic Observatory, the Centre for the Study of Global Governance, both institutes at the London School of Economics (LSE), and the Vienna Institute for International Economic Studies (wiiw). A brainstorming meeting on Reconstruction and Regional Co-operation in the Balkans was held in Vouliagmeni on 8-10 July 1999, covering the issues of security, democratisation, economic reconstruction and the role of civil society. It was attended by academics and policy makers from all the countries in the region, from a number of EU countries, from the European Commission, the USA and Russia. Based on ideas and discussions generated at this meeting, a policy paper on Balkan Reconstruction and European Integration was the product of a collaborative effort by the two LSE institutes and the wiiw. The paper was presented at a follow-up meeting on Reconstruction and Integration in Southeast Europe in Vienna on 12-13 November 1999, which focused on the economic aspects of the process of reconstruction in the Balkans. It is this policy paper that became the very first Working Paper of the wiiw Balkan Observatory Working Papers series. The Working Papers are published online at www.balkan-observatory.net, the internet portal of the wiiw Balkan Observatory. It is a portal for research and communication in relation to economic developments in Southeast Europe maintained by the wiiw since 1999. Since 2000 it also serves as a forum for the Global Development Network Southeast Europe (GDN-SEE) project, which is based on an initiative by The World Bank with financial support from the Austrian Ministry of Finance and the Oesterreichische Nationalbank. The purpose of the GDN-SEE project is the creation of research networks throughout Southeast Europe in order to enhance the economic research capacity in Southeast Europe, to build new research capacities by mobilising young researchers, to promote knowledge transfer into the region, to facilitate networking between researchers within the region, and to assist in securing knowledge transfer from researchers to policy makers. The wiiw Balkan Observatory Working Papers series is one way to achieve these objectives.



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This study has been developed in the framework of research networks initiated and monitored by wiiw under the premises of the GDN–SEE partnership.

The Global Development Network, initiated by The World Bank, is a global network of research and policy institutes working together to address the problems of national and regional development. It promotes the generation of local knowledge in developing and transition countries and aims at building research capacities in the different regions.

The Vienna Institute for International Economic Studies is a GDN Partner Institute and acts as a hub for Southeast Europe. The GDN–wiiw partnership aims to support the enhancement of economic research capacity in Southeast Europe, to promote knowledge transfer to SEE, to facilitate networking among researchers within SEE and to assist in securing knowledge transfer from researchers to policy makers.

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Guest-worker Programs and the Propensity to Emigrate

Evidence from the Work-and-travel USA program in Romania

Daniel Pop, PhD

Abstract:

Targeted seasonal guest-worker programs replace wider scope immigration policy and are expected to formalize irregular migration flows, to recruit sufficient numbers of seasonal migrants, and to provide critical revenues of source countries following the return of migrants with their earnings. Understating temporary migrant selectivity, the experience of engaging in work-and-travel abroad programs (for instance, in contrast to the existing evidence of study-abroad programs) is important for capturing the role temporary guest-worker programs could have in the extent at which the supposed “triple win” achieved. This research found that college students that participated in the work & study abroad seasonal guest-worker programs for college students are 38% less likely to emigrate compared to those that did not participate in the program.

1. Introduction

Seasonal guest-worker programs for college students (i.e. the work & travel abroad in the United States, or the working holiday makers in Australia and United Kingdom) are set-up in order to deal with seasonal labor shortages (i.e. fill-in undesirable or low-paying seasonal jobs), to legalize and control migrant flows, and to select among potential migrants according to the needs of the domestic labor markets (i.e. to compensate for temporary labor shortages during summer holidays in various service sectors).

The international circular migration of college students is mostly studied either in the framework of school-break (Bharath et al., 1999) and tourism/ backpack travel (Richards and Wilson, 2004), or as part of study-abroad programs for enhancing cross-cultural understanding and professional skills (Wiers-Jenssen, 2003; Kitsantas, 2004). Common to these approaches, in contrast to the dominant economic gain perspective of the wider migration literature, is that the benefit is defined in terms of experiential gains. According to this, college students that engage in short term study or work centered exchange programs enhance their proficiency levels in their field of study, while also gaining first hand experience in a different cultural context. However, Mansoor and Quillin (2007) discuss the potential of circular migration to yield benefits to host countries, source countries and migrants themselves all at the same time. However, for this “triple-win” to happen, according to the same authors, governments of both source and host countries need to co-ordinate their policy and co-operate in the implementation of the short exchange programs (i.e. through bilateral agreements, or partnerships).

However, the importance of understanding the ways in which the engagement in the temporary international labor migration experience offered by seasonal guest-worker

programs for college students program consists in testing the validity of the negative emigration propensity effect hypothesis of temporary migration. In order to do that, this exploratory study focuses on assessing the differentials in the propensity to migrate of students that participated compared those that did not participate in one specific seasonal guest-worker programs for college students, more specifically the work & travel abroad program of the USA. This will be done using data from Romania, where the large majority of college students who engage in legal seasonal guest-worker programs during summer academic break are enrolled in the USA's cultural-exchange program known as "work & travel abroad"¹.

The remaining of the paper is divided in five sections. Section 2 presents the conceptual framework, which is followed in Section 3 by a discussion of the design of guest worker programs. Section 4 presents the empirical model. Section 5 presents the variables and sources of data used in the analysis. While the last section presents the results.

2. Conceptual framework

Stephen Castles, in 1986, noting the shift of countries from large scale guest-workers programs towards more restrictive immigration regulations, published a paper intended to be the obituary of quest-worker programs. The main argument for the discontinuation of early macro guest-worker programs, i.e. the post-war Gastarbeiter program in Germany (between 1964-1973) or the Bracero guest-worker program in the USA (between 1942-1964), were that besides failing to reduce the immigration pressure by promoting "circular migration", they also lead to increasing integration challenges of migrants and their families. Although increasing immigration pressures and shortages on the domestic labor markets led to new talks about formalizing and selecting among existing migrants. The solution which seems to be coming about in most target countries is the design of micro programs or temporary green cards. These temporary work-programs in contrast to former macro programs are claimed to be fine-tuned by incorporating migrant selection mechanisms and measures to ensure that migration indeed becomes circular by migrants leaving the host country after their temporary work permits expire. These led Castle, in 2006, to write about the resurrection of these programs, as the same countries were gradually re-introducing quest-worker programs. For instance, EU justice and home affair ministers on the establishment at the EU level of a new temporary work visa for citizens of African countries have forcefully revived the long-dormant debates on the effectiveness of guest-worker programs to effectively address seasonal labor shortage.

These raise the issue of understanding how precisely given policy measures seeking to manage migration flows could lead to circular migration and thus yield gains to migrants, host and source economies? To unpack this question, first we need to inquire about the extent at which guest worker programs indeed lead to temporary

¹ For instance, while in 1996 the number of summer work & travel visas issued in year 2000 was 20,752, it rose to 56,105 by year 2003, and in 2005 it reached 106,000. According to estimates based on figures of intermediary companies each year approximately five-thousand students engage in work-study in the USA (number of J1 visas issued in 2006 was 6,799) from Romania.

transnational migration.

The first approach as identified by host governments is to get a grip on the domestic labor market effects of transnational labor migration through devising policies that would manage the stock of labor migrants. Papademetrio et al. (2004) identifies this effort of host governments though attempts to regularize (legalize) migration flows with the aim to curb illegal (irregular) transnational migration flows. Yet, the authors identify only marginal positive labor market effects of regularization programs. The second approach is to identify policy measures that would effectively control the inflow of migrant labor. The main, or at least the most discussed, migration policy are guest (temporary) worker programs. Such programs are not new as they have been already implemented in countries all over the world. Nevertheless, what is new in nowadays policy debates is the view or expectation that such policy measures under the form of guest worker programs could yield a “triple-win” by reducing the negative facets of transnational migration processes, but without affecting the global efficiency gains of factor mobility. More formally, Martin (2003) identifies four reasons for which guest-worker programs are established. These are labor shortage or skill shortage, foreign policy concerns, cross-border commuting, and cultural exchange and development assistance (exchange visitors, working holiday makers, and trainees). Ruhs and Martin (2008) describe the “triple-win” as host countries benefiting of expanded employment base and increased economic output, the source country benefiting of remittances and the newly acquired skills of return migrants and finally by transnational labor migrants are earning higher wages than in their source economy.

Based on the conceptualization provided by Aguinas and Newland (2007), in this paper we define circular migration as the regular movement of labor among the labor markets of two or more countries. Thus, circular migration involves the working temporarily in the host labor market. In this conceptualization temporary migration is different from permanent migration precisely because transnational migrants are in the host country for a limited period of time. From the view of a typology of circular migration we can distinguish between seasonal and temporary guest workers. Seasonal guest workers are the ones that work for a fraction of a year. Instances of such work include agricultural activity related seasonal works, or touristic activities related seasonal work. Temporary guest workers are defined by the limited period for which their employment rights granted, but usually more than one year and less than five years.

Kane (2007) identified three methods a guest worker program could be design. On one hand, there is the possibility to allow full and unrestricted access to transnational labor migrants to the labor market of the host country. On the other hand, the central government could adopt government regulated control mechanisms regarding the terms of access. Last but not least, the author mentions the possibility of sponsorship by domestic companies. In the case of the later two options countries that have temporary guest-worker programs distinguish between high and low skilled workers, and some special programs (Martin, 2003).

Esquire (2007) discusses US regulations under which US companies can secure an H-2B status for foreign workers. According to these, US companies are required to provide proof that the transnational labor migrants will not be paid less compared to

native workers and that the employment of the migrant worker is temporary. Showing that the employment is temporary the employers need to show a “sufficiently” temporary need under the following categories: one-time occurrence need, seasonal need, peak-lead need, and intermittent need. The first, one-time occurrence need, covers situations in which a temporary guest-worker fills in an otherwise permanent job, which is vacant only for a defined period of time. The second, seasonal need, concerns those types of activities that have a strict seasonal character, and that jobs are only for the given season. The third, peak-lead need, occurs when permanently employed personnel, due to short-term shifts in demand, are unable to cope with increased load, and that these activities are not likely to become part of the normal operations of the firm. The last, intermittent need can be argued in the instance when certain business related activities occur seldom.

Among the special programs the least studied guest-worker programs are the cultural exchange programs. For instance, the most articulated guest-worker system has been developed in the US with over 20 different programs. Meyers (2006) discussing the United State’s temporary worker programs arrives to the conclusion that “the system is a patchwork” and that temporary has very wide definition, as depending by program the status of temporary migrants could vary from as short as three months to as long as ten years. The different temporary worker programs are summed-up in the table below.

visa	Group concerned	Number visa
A	for diplomats, their families and staffs.	
E	for treaty based trading partners and foreign investors. Includes, the E-3 visa for Australian nationals (excluded from the H-1B quotas)	Two year, with extensions possible
F	for exchange students	allowed to work part time
H-1A	For foreign trained nurses	No longer active
H-2A	for workers temporary employed in agriculture, unskilled	no limit set Approx. 32.000 issued in year 2005 up to one year, max. 3 consecutive years
H-1B	for professions requiring BA degree temporary US non-farm jobs	approx. 120,000/ year (65,000/ year for US employers; 20,000 for MS or PhD from a US university; no limit to universities, nonprofits and government agencies), three-year, renewable once
H-2B	for temporary seasonal workers in any field, unskilled	66,000/ year One year, max. 3 consecutive years
H-2C	For temporary work in industry	Not implemented yet Six year work permit
I	for foreign journalists	
J	for exchange visitors	
L	for multinational managers and intra-company transfers	
O	for "workers of extraordinary ability"	Three years, renewable yearly
P	for athletes and entertainers	Five years, renewable once
R	for religious workers	Three years, max five years
TN	for NAFTA free trade agreement based temporary employment from Canada and Mexico	One year, renewable yearly

The Exchange Visitor Program, which is administered by the Office of Exchange

Coordination and Designation in the Bureau of Educational and Cultural Affairs, administers private and government sector programs. The number of exchange visitor visas issued grew from 286,300 in year 2002 to 340,055 in 2006. Under the private sector programs it includes cultural exchange for foreign physicians, au pairs, camp counselors, summer work/travelers, and trainee categories. The scope of the guest-worker program under the exchange visitors' category is "to increase mutual understanding between the people of the United States and the people of other countries by means of educational and cultural exchanges".

Table 2 Exchange visitor program – non-immigrant J visa	
Private sector programs	Government Programs
foreign physician	student
au pair	college/university student
camp counselor	professor
summer work/travel	research scholar
trainee categories	short-term scholar
	specialist
	teacher
	Government Visitor
	International Visitor categories

Relevant for this research is the summer Work/Travel program "is to provide bona fide foreign post-secondary students an opportunity to become directly involved in the daily life of the people of the United States through travel and temporary work for a period up to four months during their summer vacation." The eligibility requirements for participation in the Summer Work/Travel program include full-time student status in a country other than the USA.

3. The empirical model

An ordered logistic regression is chosen given that our outcome variable, the likelihood to emigrate, is an ordinal level measure. As presented in the previous section the categorical response variable (Y) with y_1, y_2, y_3 and y_4 representing the values for "likelihood to emigrate", which are "to a large extent", "to some extent", "to a little extent", and "not at all". Now, suppose that Y_i is the value of the response variable for individual i , while X_i represents the vector of covariate values for the individual ($i = 1, 2, 3, 4$), which gives the cumulative probabilities of the distribution of Y and can be expressed as:

$$\log \left[\frac{Pr(Y = y_j / X_1 \dots X_p)}{Pr(Y > y_j / X_1 \dots X_p)} \right] = \alpha_j - [(\beta_1 X_1 + \gamma_{j1} T_1) + (\beta_2 X_2 + \gamma_{j2} T_2) + (\beta_3 X_3 + \gamma_{j3} T_3)]$$

where, the parameters β_1, β_2 and β_3 represent the components of each of the covariate-specific log odds for which proportionality can be assumed, and therefore T_1, T_2 and T_3 exist for the variables with non-proportional odds. To fit the unconstrained partial proportional odds model gologit2 statistical program under

STATA was used (Williams, 2006).

4. Data, variables and methods

This study uses data from a survey for college students that were engaged at least for one summer period in the US work & travel program from Romania in the period 2002-2006. The data was collected using e-mail surveying in June – September 2007. The population universe was identified based on the files of the top two intermediary companies in the countries that provide specialized services for summer holiday programs. By comparing the number of J1 visas issued and the number of students working with the two selected companies we estimate that the sample frame covers approximately 80 per cent of all students working abroad under J1 visas from Romania. The database includes 16,384 students from which a simple random sample of 400 was drawn to be interviewed. To boost response rate students were offered an incentive under the form of a 5 euro phone card. From the total of 400 selected e-mail contacts 84 bounced back as inexistent e-mail address. These were replaced from the sample using the same random selection procedure; this was repeated until the total sample was reached. In the first phase 194 students responded, and after sending two reminder letters this was raised to 268, which represent a 67% response rate, but due to errors in filling the questionnaire and missing items the number of valid questionnaires is 236. Students that filled the questionnaire with error were contacted and where possible the errors were corrected by phone. Re-migration in the sample represents 14.95%, with 7.14% re-migrating more than twice in the given period. Another random sample of 200 students from Babes-Bolyai University was selected from which a total 175 responses were collected.

5. Results

The propensity to migrate of college students was measured using an ordinal scale, and respondents were asked to respond to the following question: “To what extent do you expect to live abroad in the future?”, with response options “To a large extent”, “To some extent”, “To a little extent”, and “Not at all” (codes for no answer and missing were also used to quantify non-response). The explanatory variables include prior experience in engaging in a temporary guest-worker program, as part of the USA work-and-travel program, tuition paying or not, gender, whether working during academic year, work during academic year, volunteer membership (civic activities variable that measures the level of activism in different type organizations, i.e. artistic of hobby group, sport club, political party, religious organization, environmental organization and other type of civic organizations), and extent of following news.

Table 3
Definitions of variables

No.	Variable	Definition
	Outcome variable	
	likelihood to emigrate	1 = very likely, 2 = likely, 3 = not likely 4 = not likely at all

Explanatory variables

engaged in "Work and Travel" program 1 = yes (0 = didn't participate in program)

The significant chi square values of the ordered logit regression indicates that there are significant differences in the propensity of students to emigrate depending on whether they participate or not in the seasonal guest-worker programs for college students, i.e. work & travel aboard program or no. The table in the appendix presenting the detailed results of the ordered logit regression indicates that college students that participated in the work & study abroad seasonal guest-worker programs for college students are 38% less likely to emigrate compared to those that did not participate in the program. This finding seems to support the argument according to which well-designed seasonal guest-worker programs for college students could be negatively associated with propensities of emigration. The main interpretation of the results is that the experiential gains accumulated during the participation in the seasonal guest-worker programs for college students enhances the ability of students to correctly evaluate the possible gains and costs of emigration, and therefore they judge the likelihood of emigration depending on the extent to which their experience was a positive one. Thus, first hand experience in the possible target country could shape the attitudes about the likelihood of future emigration, which points to the importance of such short term targeted guest worker programs to help take an informed decision about emigration choice. The policy lesson is that channeling migration from informal one way route towards short term experiences could influence the propensity of emigration at a later stage in life.

This paper analyzed the ways in which the engagement in the temporary international labor migration experience offered by seasonal guest-worker programs for college students program could be associated with the negative emigration propensity effect of temporary migration. Higher preferences to remain in the home country were found among those college students that engaged in work & study abroad compared to those that did not. However, one of the main limitations of the study is that it had only circumstantial evidence on the possible relationship.

Appendix Ordered logit regression estimates

```
. gologit2 saemigrez workusa, auto gamma lrf
```

Testing parallel lines assumption using the .05 level of significance...

Step 1: Constraints for parallel lines imposed for workusa (P Value = 0.1653)
 Step 2: All explanatory variables meet the pl assumption

Wald test of parallel lines assumption for the final model:

```
( 1) [1]workusa - [2]workusa = 0
( 2) [1]workusa - [3]workusa = 0
( 3) [1]workusa - [4]workusa = 0
```

```
chi2( 3) = 5.09
Prob > chi2 = 0.1653
```

An insignificant test statistic indicates that the final model does not violate the proportional odds/ parallel lines assumption

If you re-estimate this exact same model with gologit2, instead of autofit you can save time by using the parameter

```
pl(workusa)
```

```
Generalized Ordered Logit Estimates          Number of obs = 360
LR chi2(1) = 4.12
Prob > chi2 = 0.0424
Pseudo R2 = 0.0036
Log likelihood = -565.37652
```

```
( 1) [1]workusa - [2]workusa = 0
( 2) [2]workusa - [3]workusa = 0
( 3) [3]workusa - [4]workusa = 0
```

	saemigrez	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
1	workusa	-.3833178	.1892292	-2.03	0.043	-.7542003	-.0124353
	_cons	1.59009	.1719684	9.25	0.000	1.253038	1.927142
2	workusa	-.3833178	.1892292	-2.03	0.043	-.7542003	-.0124353
	_cons	.7765633	.154504	5.03	0.000	.473741	1.079386
3	workusa	-.3833178	.1892292	-2.03	0.043	-.7542003	-.0124353
	_cons	.2119919	.1489613	1.42	0.155	-.0799668	.5039506
4	workusa	-.3833178	.1892292	-2.03	0.043	-.7542003	-.0124353
	_cons	-.7003952	.1522773	-4.60	0.000	-.9988533	-.4019371

Alternative parameterization: Gammas are deviations from proportionality

	saemigrez	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
Beta	workusa	-.3833178	.1892292	-2.03	0.043	-.7542003	-.0124353
Alpha	_cons_1	1.59009	.1719684	9.25	0.000	1.253038	1.927142
	_cons_2	.7765633	.154504	5.03	0.000	.473741	1.079386
	_cons_3	.2119919	.1489613	1.42	0.155	-.0799668	.5039506
	_cons_4	-.7003952	.1522773	-4.60	0.000	-.9988533	-.4019371

6. References

- Agunias, Doreen and Kathleen Newland (2007) "Circular Migration: Trends, Policy Routes and Ways Forward", Policy Brief, Migration Policy Institute, April.
- Castles, Stephen (1986) "The Guest-Workers in Western Europe: An Obituary" *International Migration Review*
- Castles, Stephen (2006) "Guestworkers in Europe: A Resurrection?" *The International Migration Review*, Vol. 40, No. 4, pp. 741-766.
- Esquire, Jay C. Ruby (2007) "Importing a Legal Workforce: H-2B Temporary Work Visas for Foreign Construction Workers", *Construction Accounting & Taxation*, Vol. 17, No. 1, pp. 5-14.
- Kane, Tim (2007) "Sponsorship: The Key to a Temporary Worker Program," Heritage Foundation *Executive Memorandum* No. 1022, February 22, 2007, at www.heritage.org/Research/Immigration/em1022.cfm.
- Kitsantas, Anastasia. (2004) "Studying Abroad: The Role of College Students' Goals on the Development of Cross-Cultural Skills and Global Understanding" *College Student Journal*, Vol. 38, Issue 3. pp. 441-451.
- Mansoor, A., Quillin, B. (2007). *Migration and Remittances. Eastern Europe and the Former Soviet Union*. Washington DC: World Bank.
- Martin, Philip L. (2003) "Managing Labor Migration: Temporary Worker Programs for the 21st Century", *International Institute for Labor Studies*, available at: <http://www-ilo-mirror.cornell.edu/public/english/bureau/inst/download/migration3.pdf>
- Meyers, Deborah Waller (2006) "Temporary Worker Programs: A Patchwork Policy Response" *Migration Policy Institute*.
- Papademetriou, Demetrios G.; Kevin O'Neil and Maia Jachimowicz (2004) "Observations on Regularization and the Labor Market Performance of Unauthorized and Regularized Immigrants" *Migration Policy Institute*, Washington, D.C., available at: http://www.europa.nl/employment_social/incentive_measures/studies/regularisation5.pdf
- Ruhs, Martin and Philip Martin (2008) "Numbers vs. Rights: Trade-Offs and Guest Worker Programs", *The International Migration Review*, spring, Vol. 42, No. 1 pp. 249-264.
- Wiers-Jensen, Janneke (2003). Norwegian Students Abroad: experiences of students from a linguistically and geographically peripheral European country, *Studies in Higher Education*, Vol. 28, No. 3, pp. 391-411.
- Williams, Richard. 2006. "Generalized Ordered Logit/ Partial Proportional Odds Models for Ordinal Dependent Variables." *The Stata Journal*, Vol. 6, No. 1, pp. 58-82.