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Matti Sarvimäki, Valtion taloudellinen tutkimuskeskus

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Valtion taloudellinen tutkimuskeskus
VATT Institute for Economic Research
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Abstract

This paper documents Finland's policy response to the increase in asylum applications in 2015 and the labor market performance of earlier immigrants living in Finland. Immigrants born in Afghanistan, Iraq and Somalia had substantially lower employment rates, earned less and received more social benefits than other immigrant groups or natives in 1990–2013. The immigrant-native gaps in employment and earnings decreased over time but remained large. Ten years after arriving in Finland, the average earnings of immigrant men from these countries were only 22–38 percent of the average earnings of native men of the same age. The relative earnings of women were even smaller. Furthermore, the difference in equivalence-scaled social benefits persisted over time despite the narrowing of earnings gaps.

Key words: integration, employment, immigrants, refugees, asylum seekers

JEL classes: J61, J31

Tiivistelmä

Tämä artikkeli tarkastelee Suomessa asuvien maahanmuuttajien pärjäämistä työmarkkinoilla vuosina 1990–2013, ja esittelee lyhyesti politiikkamuutoksia, joita Suomessa tehtiin syksystä 2015 alkaen, kun turvapaikanhakijoiden määrä äkillisesti kasvoi. Afganistanissa, Irakissa ja Somaliassa syntyneiden maahanmuuttajien työllisyys ja tulot olivat huomattavasti pienemmät kuin muissa maissa syntyneiden maahanmuuttajien tai kantaväestön. Erot maahanmuuttajien ja kantaväestön välillä pienenevät Suomessa asutun ajan kuluessa, mutta ne pysyvät merkittävinä myös pidemmällä aikavälillä. Kymmenen vuotta Suomeen muuttamisen jälkeen Afganistanissa, Irakissa ja Somaliassa syntyneiden miesten työtulot olivat vain 22–38 prosenttia samanikäisten kantaväestöön kuuluvien miesten työtuloista. Naisten kohdalla suhteelliset tuloerot olivat vieläkin suuremmat. Erot ekvivalenssi-skaalatuissa tulonsiirroissa pysyivät melko vakaina Suomessa asutun ajan kuluessa siitä huolimatta, että erot työtuloissa pienenevät.

Asiasanat: kotoutuminen, työllisyys, maahanmuutto, pakolaiset, turvapaikanhakijat

JEL-luokat: J61, J31

Contents

1. Introduction

Between 2014 and 2015, the number of asylum applications filed in Finland increased by 890 percent. While the absolute numbers remained at roughly the level of a "normal" year in neighboring Sweden, inflows on this scale had not been seen in Finland since World War II. Like everywhere in Europe, stories of asylum seekers filled the news and captured the public imagination. A major part of the ensuing policy debate concerned the expected labor market performance of those who would stay in Finland and the consequent impact on public finances.

This paper aims to inform the policy debate by documenting how earlier immigrants from refugee-sending countries have coped in the Finnish labor market in 1990–2013. The results are rather bleak. At the end of their first year in Finland, only four percent of men born in Iraq were employed and their average earnings were only four percent of the average earnings of native men of the same age. This immigrant-native gap decreased over time, but remained large. Ten years after arrival, the average earnings of men born in Iraq were still less than a quarter of the average earnings of same-age native men. The results for men born in Afghanistan and Somalia are similar, except that they experienced slightly faster earnings growth than Iraqis. The differences in labor market performance between women from these countries and native women were even larger than those for men.

The low earnings of immigrants from refugee-sending countries are partly reflected in their social benefits. Immigrants from Afghanistan, Iraq and Somalia receive roughly twice as much in (equivalence-scaled) benefits as natives. However, despite an increase in earnings over time in Finland, benefits tend to remain quite constant. In fact, earnings and benefits increase at the same time among some immigrant groups. These patterns highlight the complexity of the Finnish benefits system and the importance of examining both labor market performance and benefits when assessing the fiscal effect of immigration.

An unfortunate limitation of my analysis is that Statistics Finland does not currently hold information on the residence permit status of immigrants. While the majority of immigrants from Afghanistan, Iraq and Somalia are likely to be refugees (or family-reunified members of refugees), country of birth is unlikely to be a good approximation for residence status for immigrants from other origin regions. For example, while almost one thousand Russians obtained asylum in Finland between 2000 and 2015, they and their families represent only a small fraction of the roughly 80,000 Russian immigrants living in Finland in 2015.[1]

[1] The number of asylums is from the Finnish Immigration Service and the number of Russian immigrants is from Statistics Finland. The latter is defined as persons whose "background country" is either Russia or the Soviet Union.

This paper adds to the large literature examining the labor market integration of immigrants (see Borjas 1999 and Kerr and Kerr 2011 for reviews). Sarvimäki (2011) documents the integration of immigrants arriving in the 1990s in the Finnish labor markets. Previous work examining other Nordic countries includes Edin et al. (2000), Barth et al. (2004), Nielsen et al. (2004), and papers in this volume. Salminen (2015) presents a detailed comparison of the social benefits and the use of public services among immigrants living in Finland by country of birth.

The rest of this paper is organized as follows. The next two sections provide a brief history of the pattern of refugees in Finland and an overview of the policy responses to the rapid increase in asylum seekers in 2015. Section 4 presents the data and Sections 5 and 6 the results. The final section concludes.

2. Refugees in Finland

Finland has a long, if often forgotten, history as a destination for refugees.[2] After gaining independence in the midst of the Russian Revolution, Finland became a natural first destination for those fleeing the revolution from northwest Russia. According to official statistics, roughly 20,000 refugees from Russia were living in Finland in 1922. However, this number is likely to be an underestimate due to incomplete registration.

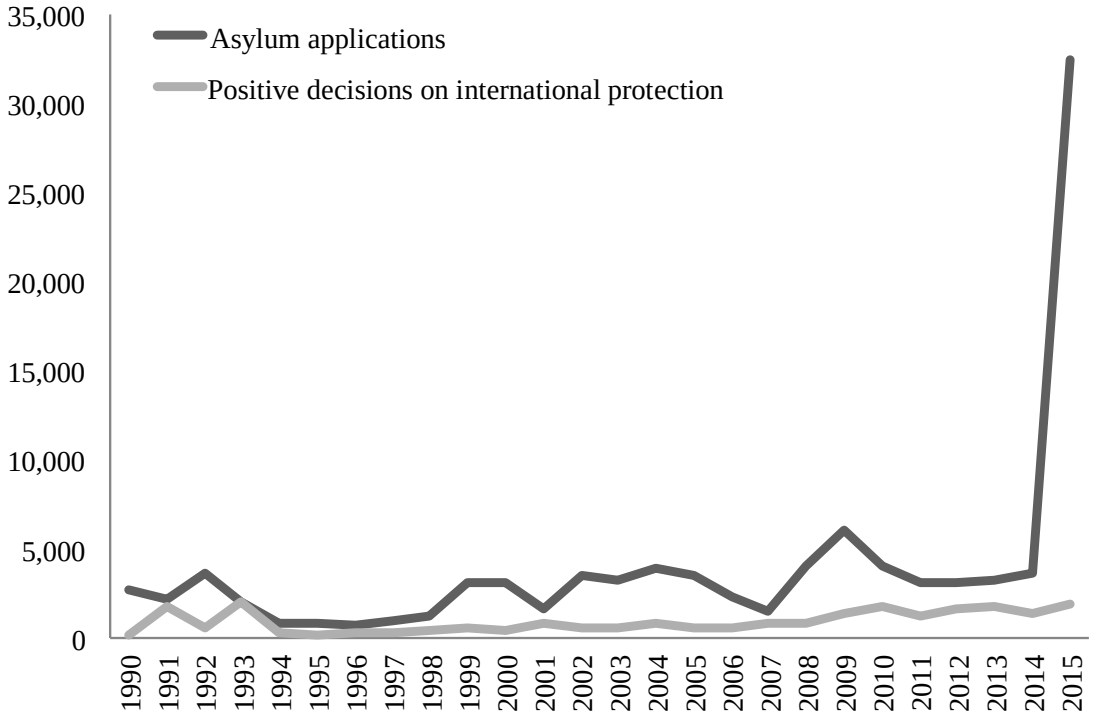
During World War II, the numbers increased dramatically as 430,000 persons (11 percent of the Finnish population) were internally displaced from areas ceded to the Soviet Union. In addition, 63,000 Ingrian Finns were moved to Finland during the war. These two groups faced very different policies. The displaced population was resettled in the remaining parts of Finland and gained compensation for their lost property (see e.g. Pihkala 1952 for discussion). This resettlement policy is widely considered a success. Waris et al. (1952) argue that the social integration of the displaced population was well underway already in the late 1940s, and Sarvimäki et al. (2016) show that the displaced population fared remarkably well in the post-war labor market.

In contrast, Ingrian Finns were returned to the Soviet Union at the end of the war. This marked a new era in Finland's refugee policy. All kinds of immigration were tightly restricted and virtually no one was granted asylum. A tentative opening was made with the arrival of 180 Chilean refugees in 1973–1978. A more organized refugee policy began in 1979 with the admission of the first Vietnamese refugees. However, numbers remained very limited throughout the 1980s.

The number of individuals seeking international protection from Finland increased in the early 1990s, and Finland granted asylum to about 5,000 individuals between 1990 and 1994. Most of these were fleeing the civil wars in disintegrating Yugoslavia and Somalia. By the end of the 1990s, roughly 18,000 refugees and their family members were living in Finland. In addition, Ingrian Finns and their descendants were granted return migrant status in the early 1990s and roughly 30,000 Ingrian Finns moved to Finland during the next two decades.

[2] The numbers quoted in this section are from Martikainen et al. (2013), and from the websites of the Finnish Immigration Service and Statistics Finland (visited in September 2016).

Figure 1. Asylum applications and positive decisions on international protection, 1990–2015

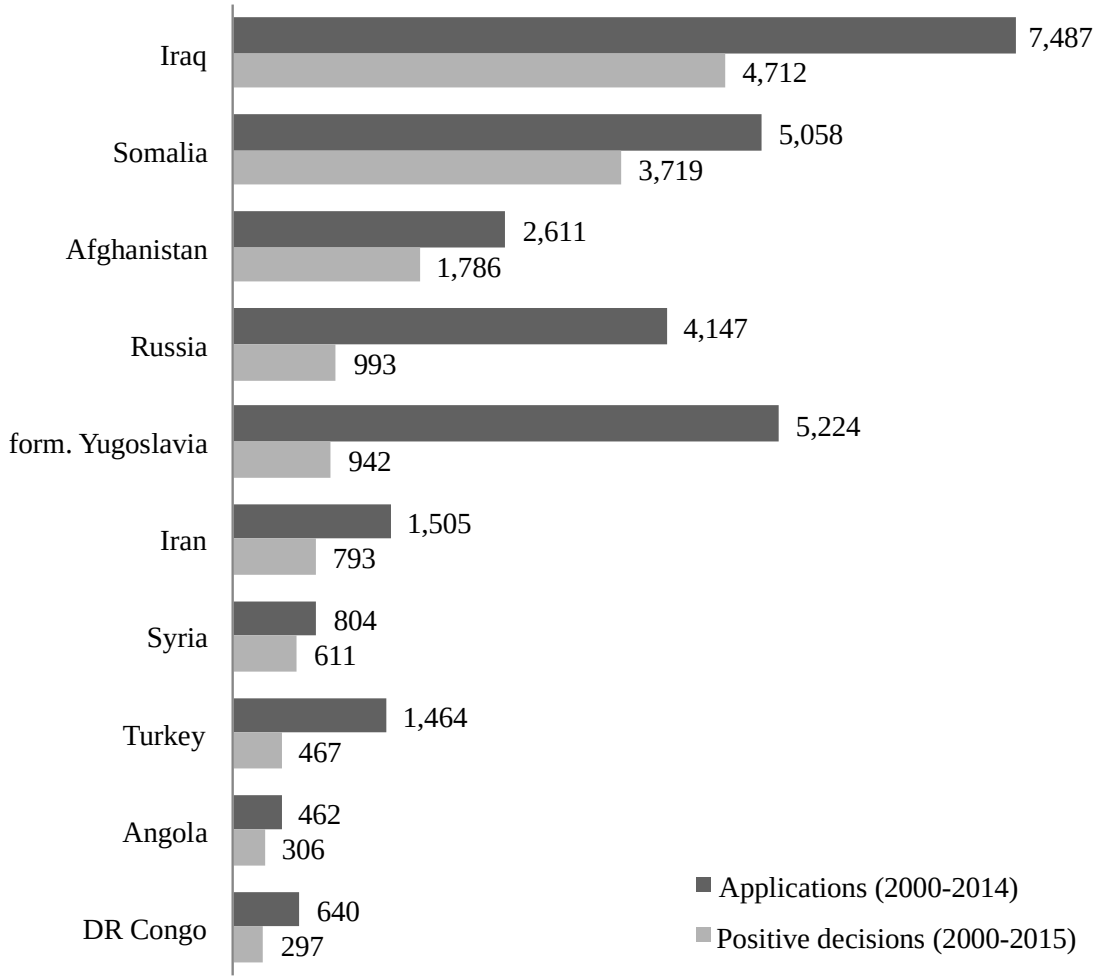


Data source: Finnish Immigration Service.

As shown in Figure 1, the number of annual asylum applications ranged between 1,500 and 6,000 and positive decisions between 500 and 1,800 in the period from 1990 to 2014. These inflows represented a relatively small share of overall immigration. During this period, the total immigrant population grew almost ninefold from 37,000 to 320,000 persons (or from 0.8 to 5.9 percent of the population).

Figure 2 presents the top10 source countries of refugees and asylum seekers in 2000–2014. For each source country, the top bars plot the number of asylum applications and the bottom bars the number of positive decisions (including quota refugees). Three countries – Iraq, Somalia and Afghanistan – correspond to 60 percent of positive decisions and 30 percent of applications. Citizens of Russia and the former Yugoslavia also filed a relatively large number of applications, but most of these were declined. Furthermore, there were only 804 applications from Syrians, almost all of them made in 2011–2014.

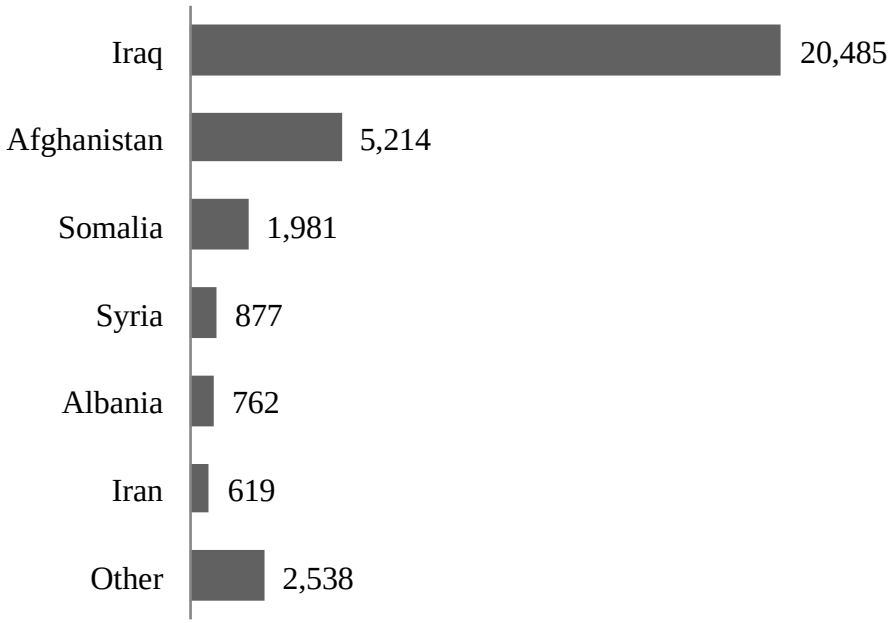
Figure 2. Asylum applications and positive decisions on international protection, by country, 2000–2014



Data source: Finnish Immigration Service.

Little of the developments discussed above can be seen from Figure 1, however, because the scale of the vertical axis is so dominated by the last observation in the time-series for asylum applications. In 2015, Finland received 32,476 applications – a large proportion of which are still being processed by the Immigration Service. In comparison, there were 5,988 applications in the previous record year in 2009, and an average of 2,700 applications during the 1990–2014 period.

Figure 3. Asylum applications by country, 2015



Data source: Finnish Immigration Service.

Figure 3 presents 2015 asylum applications by origin country. The top three countries are the same as in figure 2, but almost two thirds of the applications were filed by Iraqis . While there are more applications from Syrians than during the previous 15 years combined, they correspond to less than three percent of all applicants.

3. Policy responses to the 2015 increase in asylum seekers

The Finnish government responded to the rapid increase in asylum seekers in three ways. First, it had to cope with the situation at hand. Between August and December 2015, the number of reception centers increased from 22 to 144 and the number of workers at the Immigration Service from 365 to 508.[3] Furthermore, the asylum application process was accelerated by increasing automation and reducing the duration of asylum interviews.

The second response was to make Finland a less attractive destination. For instance, the Immigration Service published a press release on May 16, 2016 entitled "Humanitarian protection no longer granted; new guidelines issued for Afghanistan, Iraq and Somalia". The content was arguably less dramatic than the title. Humanitarian protection referred to one type of residence permit that had now been repealed, while asylum seekers could still gain residence through the asylum procedure or on the basis of subsidiary protection.[4] Nevertheless, removing this residence permit category clearly tightened asylum policy. Furthermore, the press release stated that the security situation had improved in Afghanistan, Iraq and Somalia and that the Immigration Service had updated its country guidelines accordingly.

Other forms of reducing "pull factors" included restrictions in family reunification and reductions in social benefits. According to the new rules, recently admitted refugees can apply for family reunification only if they have sufficient income. For instance, a person wishing to bring a spouse and two children to Finland would need to have a net market income of at least 2,600 euros per month. However, this income requirement does not apply to families formed before the refugee arrived in Finland, if the refugee applies for family reunification within three months of obtaining asylum.[5]

The third policy response was to rethink integration policies. The government published an action plan on May 2016 on the overhaul of integration services.[6] The plan included measures to streamline the inception of integration services; to improve recognition of education obtained abroad; to integrate language studies into other studies and so forth. In addition, a new type of public-private initiative

[3] The figures are from the 2015 annual report of the Finnish Immigration Service.

[4] Before May 16, 2016, residence permits could be granted on the basis of humanitarian protection when the applicant did not meet the requirements for asylum, but could not return to her home country because of a poor security situation or an environmental disaster.

[5] Those who have been granted international protection on other grounds always have to fulfil the income requirement.

[6] See dlvr.it/LCph5k for a press release on the action plan and https://t.co/ZaOySX8xGG for a press release on the SIB-based integration programs.

was launched. This program combines short language training with a quick pathway to employment and further on-the-job language training. Another novelty of the new program is that it is funded by private capital and investors are compensated based on the unemployment benefits received and taxes paid by the participants (in comparison to a control group participating in other types of integration programs). More precisely, the impact evaluation is conducted as an RCT, where the Ministry of Employment and Economy invites randomly selected refugees to participate in the new program.

4. Data

Statistics Finland created my data by combining information from several administrative registers. These data contain annual information on country of birth, mother tongue, nationality, family structure, employment and income for the entire working age population living in Finland in 1988–2013. I focus on 25–60 year old individuals who immigrated at age 18 or older.[7]

A limitation of these data is that they contain no information on the type of residence permit. Thus I have to approximate refugee status based on the country of birth. This approximation is clearly problematic for origin areas such as the former Soviet Union and Turkey. While some immigrants from these countries moved to Finland due to a need for international protection, most came for other reasons. On the other hand, the vast majority of those coming from Afghanistan, Iraq and Somalia are likely to have entered Finland for international protection or as family members of those granted asylum. Furthermore, Finland had no history of labor migration from the former Yugoslavia – or from virtually anywhere prior to the early 1990s. Thus the share of refugees among those born in the former Yugoslavia is likely to be higher in Finland than in the other Nordic countries.

Table 1 reports basic background characteristics for eight groups of immigrants and natives. In comparison to natives, immigrants from most origin areas tend to be younger, more often male, more often married and to have more children. The differences are particularly pronounced among those coming from Afghanistan, Iraq and Somalia, whereas immigrants from the former Soviet Union and the OECD area are more similar to natives along these dimensions.

[7] For computational reasons, the results reported in Tables 2–5 and A1 use data containing the full population of immigrants and a 10% random sample of natives.

Table 1. Descriptive statistics

	Region of origin								
	Iraq	Afghanistan	Somalia	former Yugoslavia	former Soviet Union	Turkey	OECD	Other	Natives
Age	37.8	38.3	37.1	38.6	40.9	35.6	36.9	37.2	42.7
Age at arrival	31.3	33.5	29.0	30.9	33.9	28.4	31.6	31.5	.
Female	0.38	0.49	0.46	0.43	0.65	0.20	0.33	0.49	0.49
Number of children	2.1	1.9	3.4	1.8	0.9	1.4	1.0	1.1	1.0
Marital status									
Single	0.20	0.14	0.13	0.12	0.11	0.12	0.41	0.27	0.31
Married	0.69	0.74	0.67	0.78	0.70	0.69	0.50	0.59	0.55
Divorced	0.10	0.06	0.17	0.08	0.17	0.18	0.09	0.14	0.12
Widow	0.01	0.07	0.03	0.02	0.02	0.00	0.00	0.01	0.02
Year of arrival									
1990-1994	0.13	0.01	0.31	0.28	0.23	0.19	0.15	0.14	.
1995-1999	0.24	0.05	0.15	0.23	0.19	0.15	0.19	0.11	.
2000-2004	0.19	0.48	0.11	0.23	0.23	0.22	0.24	0.20	.
2005-2009	0.44	0.47	0.43	0.25	0.35	0.44	0.42	0.54	.
Years to first job	4.5	4.2	5.6	4.1	3.0	2.3	1.0	2.0	.
Emigrates during the first 10 years	0.10	0.07	0.19	0.12	0.16	0.08	0.22	0.11	
Observations	44,146	12,350	51,211	64,359	453,710	44,532	208,507	641,116	58,888,641
Individuals	5,184	1,863	5,027	5,661	45,797	4,698	32,635	100,038	3,920,391

Note: Averages from population level data on 25–60 year old immigrants who immigrated at age 18 or older and natives in years 1990–2013. Data source: see section 4.

5. Employment

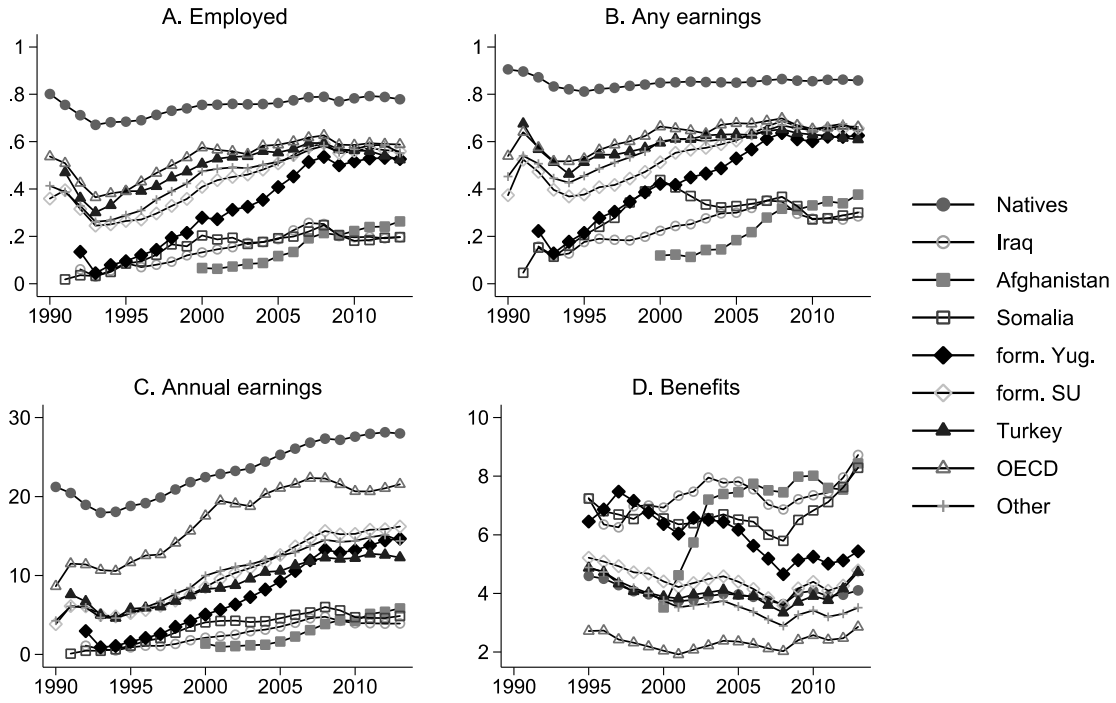
The top panels of Figure 4 present employment rates for the eight immigrant groups and natives in 1990–2013. Employment is defined either as holding a job at the end of the year (panel A) or having any wage, salary or entrepreneurial income (panel B). The latter definition yields higher employment rates, but the patterns across immigrant groups and over time are very similar for both measures. Thus for the rest of this paper I focus on employment at the end of the year.

Figure 4 shows a large variation in employment rates across immigrant groups. While immigrants had a lower employment rate than natives throughout the 1990–2013 period, the immigrant-native gap decreased substantially over time. Another notable pattern is that in the 1990s there were large differences in the employment rates of immigrants from the OECD countries, the former Soviet Union, former Yugoslavia, Turkey and the group "others". By 2013, however, these differences had largely disappeared and the employment rates of all these groups had stabilized at 52–58 percent. In contrast, the employment rates of immigrants from Iraq, Afghanistan and Somalia moved roughly together and remained modest at 20–26 percent in 2013.

A limitation of time-series such as those reported in Figure 4 is that they mix together employment dynamics attributable to the integration process and changes in the composition of the immigrant population. The first part of the composition effect is due to the fact that it typically takes immigrants some time to find employment after arriving in the host country. Thus employment rates may differ between immigrant groups simply because one group has a larger share of recent arrivals.

Figure 5 illustrates the issue by separately plotting the employment rates for four arrival cohorts. It shows that, within each origin region, those who arrived earlier tend to work more than those who arrived more recently. The employment of each arrival cohort also increased faster than the employment of the entire immigrant population from the same origin region. Furthermore, Figure 5 illustrates heterogeneity between immigrants from the same origin areas arriving in different years. For example, immigrants from Iraq and Somalia arriving in the early 2000s have had a higher employment rate from 2008 onwards than their compatriots who arrived in the late 1990s.

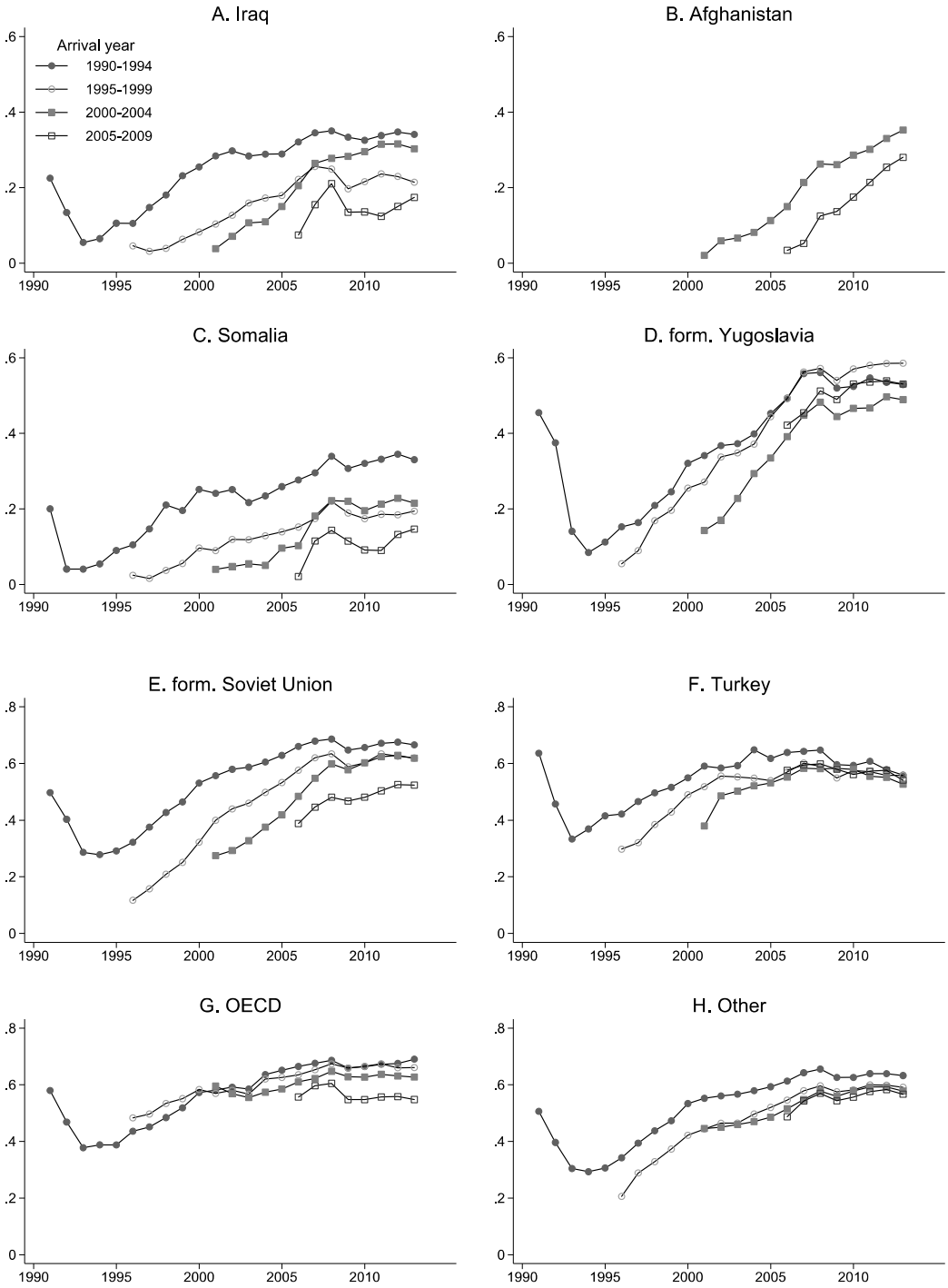
Figure 4. Employment rates, average earnings and average equivalence scaled benefits by country of origin, 1990–2013



Note: This figure presents time-series for (a) employment rate at the end of the year, (b) share of individuals who have any earnings during a year, (c) average annual earnings (including zeros), and (d) average equivalence-scaled income transfers for 25–60 year old individuals who immigrated at age 18 or older. Earnings and benefits converted to 2010 euros using Statistics Finland's consumer price index. Data source: see section 4.

The second key component of the composition effect is that as immigrants spend more time in the host country, they also grow older. Thus the patterns presented in Figure 5 mix together improvements in employment due to accumulating country-specific experience and improvements due to accumulating experience more generally. A large literature has attempted to isolate these two sources of improved labor market performance from each other by comparing the employment and earnings dynamics of immigrants to those of observationally identical natives (see e.g. Borjas, 1999, and Kerr and Kerr, 2011, for reviews).

Figure 5. Employment rate by country of origin and arrival cohort



Note: This figure presents time-series for employment rate at the end of the year by region of origin in 1990–2013 for 25–60 year old individuals who immigrated at age 18 or older. Data source: see section 4.

Table 2. Differences in employment rates over time lived in Finland

	Men				Women			
	1	5	10	15	1	5	10	15
Iraq	-0.69	-0.53	-0.48	-0.50	-0.74	-0.68	-0.64	-0.63
	(0.01)	(0.01)	(0.01)	(0.02)	(0.00)	(0.01)	(0.01)	(0.02)
Afghanistan	-0.69	-0.44	-0.37	.	-0.77	-0.69	-0.58	.
	(0.01)	(0.02)	(0.03)		(0.00)	(0.01)	(0.02)	
Somalia	-0.69	-0.55	-0.48	-0.48	-0.72	-0.68	-0.68	-0.66
	(0.01)	(0.01)	(0.02)	(0.02)	(0.00)	(0.01)	(0.01)	(0.01)
Yugoslavia	-0.43	-0.33	-0.27	-0.18	-0.61	-0.55	-0.47	-0.37
(former)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Soviet Union	-0.30	-0.20	-0.15	-0.12	-0.52	-0.35	-0.22	-0.17
(former)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
Turkey	-0.25	-0.15	-0.17	-0.17	-0.63	-0.60	-0.54	-0.53
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.04)
OECD	-0.19	-0.20	-0.14	-0.11	-0.31	-0.31	-0.26	-0.22
	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)
Other	-0.20	-0.23	-0.22	-0.20	-0.38	-0.31	-0.24	-0.19
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
All	-0.26	-0.24	-0.22	-0.20	-0.45	-0.36	-0.28	-0.23
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

Note: This table reports immigrant-native employment gaps after conditioning on gender, age, calendar year and time lived in Finland. The estimates are constructed as $y^{g}_{ysm} = \sum \theta^{g}(ysm,t,\mathbf{X})[e^{g}(ysm,t,\mathbf{X}) - e^{n}(t,\mathbf{X})]$, where $e^{g}(ysm,t,\mathbf{X})$ is the employment rate of immigrants from source area g at the end of year t who have background characteristics **X** (age and gender) and have lived in Finland for *ysm* years; $e^{n}(t,\mathbf{X})$ is the employment rate of natives with the same background characteristics **X** in the same year t, and the weights $\theta^{g}(ysm,t,\mathbf{X}) = N^{g}(ysm,t,\mathbf{X})/N^{g}(ysm)$ are the share of immigrants from source area g in year t with characteristics **X** out of all immigrants from this source area observed in their ysm^{th} year in Finland. Bootstrapped standard errors (in parentheses) are calculated using 100 replications using data for a random sample of 10% of natives and the full population of immigrants. Data source: see section 4.

Table 2 reports employment rate gaps between immigrants and natives over time lived in Finland. I constructed these estimates by comparing the employment rates of immigrants to the employment rate of natives of the same age and gender during the same calendar year (see the note to table 2 for details). The first entry, at the top-left, shows that during their first full calendar year in Finland, men from Iraq had a 70 percentage point lower employment rate than native men of the same age. Over time, their employment grew faster than that of natives, but even after ten years in Finland, the employment gap was 48 percentage points.

The corresponding figures for men from Somalia were almost identical at 68 percentage points in the first year and 48 percentage points ten years after arrival, respectively. Afghani men started with a similarly large initial gap, but experienced somewhat faster employment growth. Nevertheless, at the end of their tenth year in Finland, their employment rate was 37 percentage points lower than that of same-age native men.

The remainder of table 2 reports similar measures for the other immigrant groups. There are three notable patterns. Men from OECD countries had the highest relative employment rates, but even for them the employment gap remained at 14 percentage points a decade after moving to Finland. The relative employment rates of women were lower than those of men for all groups. Finally, immigrants' employment rates tended to approach the employment rates of natives during the first ten years in Finland, but the gaps remained roughly constant after that.

The third potential source of composition effects is due to selective outmigration (see Dustmann and Görlach, 2015, for discussion). During their first ten years in Finland, 15 percent of immigrants leave Finland (see Table 1). If those with particularly low employment prospects were more likely to emigrate than those with better chances of finding employment, the immigrant-native gap would decrease simply due to changes in the average characteristics of the remaining immigrant population. Conversely, if those with the highest employment rates were more likely to leave, the composition changes would mask part of the labor market integration among those staying. Appendix table A1 examines this issue by reproducing table 2 using data only for those who stay in Finland for at least 10 years. While the immigrant-native gaps tend to be slightly narrower for immigrants who stayed longer, these differences are small and do not affect any of my conclusions. Thus I include all immigrants in the rest of the analysis regardless of whether they end up staying or leaving Finland.

6. Earnings

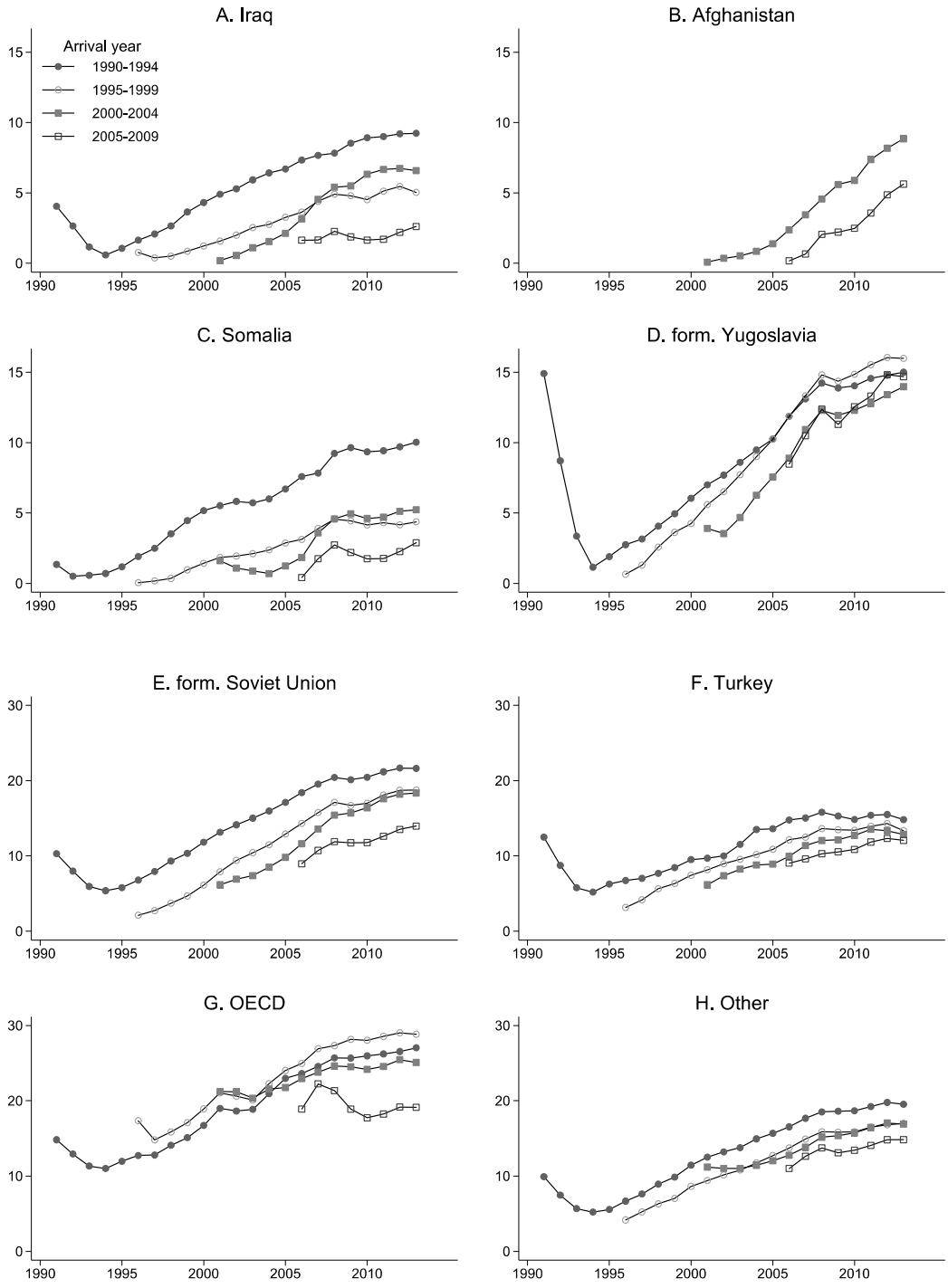
I next repeat the analysis above, but now using annual earnings as an outcome variable. This provides a more comprehensive view of labor market integration than employment rates, because annual earnings capture both wages and the hours worked during a year. I measure earnings as the sum of total wages, salary and entrepreneurial income and include individuals with zero earnings in the analysis. All monetary measures are converted to 2010 euros using Statistics Finland's consumer price index.

Panel C of figure 4 presents a largely similar picture as panels A and B. All immigrant groups have lower average earnings than natives and those from Afghanistan, Iraq and Somalia fare particularly badly. However, in contrast to the employment rates, immigrants from OECD countries have substantially higher average earnings than other immigrant groups. That is, immigrants from OECD countries either work more hours or have higher wages (or both).

Figure 6 and table 5 document earnings growth over time lived in Finland. Again, the results closely mirror those for employment. During their first full calendar year in Finland, Iraqi men earned only four percent of what comparable natives did. Over time, their earnings grew faster than the earnings of natives, but even after ten years in Finland, the average earnings of Iraqi men were less than a quarter of the average earnings of native men of the same age. The relative earnings of immigrants from Afghanistan and Somalia grew somewhat faster. Ten years after arrival the average earnings of Afghani men were 38 percent and the average earnings of Somali men 28 percent of the earnings of same-age native men.

Other patterns are also qualitatively similar to those for employment. As noted above, the most important difference is that the earnings of men from OECD countries substantially differed from the earnings of other non-refugee immigrant groups despite these groups having had roughly similar employment rates. Again, the relative earnings of women were lower than those of men for all groups and immigrants' earnings approached the earnings of natives during the first decade after arrival. However, the gaps remained large even after living in Finland for more than a decade.

Figure 6. Average annual earnings by country of origin and arrival cohort



Note: This figure presents time-series for average annual earnings by region of origin in 1990–2013 for 25–60 year old individuals who immigrated at age 18 or older. Data source: see section 4.

Table 3. Relative annual earnings over time lived in Finland

	Men				Women			
	1	5	10	15	1	5	10	15
Iraq	0.04	0.15	0.22	0.21	0.01	0.07	0.13	0.15
	(0.00)	(0.01)	(0.01)	(0.02)	(0.00)	(0.01)	(0.01)	(0.02)
Afghanistan	0.04	0.25	0.38	.	0.01	0.06	0.23	.
	(0.01)	(0.02)	(0.04)		(0.00)	(0.01)	(0.03)	
Somalia	0.04	0.17	0.29	0.31	0.01	0.06	0.09	0.12
	(0.00)	(0.01)	(0.01)	(0.02)	(0.00)	(0.01)	(0.01)	(0.01)
Yugoslavia	0.26	0.43	0.48	0.51	0.10	0.18	0.29	0.39
(former)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Soviet Union	0.45	0.60	0.69	0.70	0.21	0.40	0.57	0.67
(former)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)
Turkey	0.34	0.48	0.44	0.46	0.11	0.14	0.22	0.25
	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.02)	(0.02)	(0.05)
OECD	0.81	0.78	0.87	0.88	0.58	0.57	0.63	0.70
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.03)
Other	0.52	0.55	0.56	0.57	0.37	0.47	0.55	0.60
	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)
All	0.52	0.57	0.60	0.60	0.31	0.41	0.52	0.59
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)

Note: This table reports average relative earnings of immigrants in comparison to natives of the same age and gender. The estimates are constructed as $y^{g}_{ysm} = \sum \theta^{g}(ysm, t, \mathbf{X})[w^{g}(ysm, t, \mathbf{X}) / w^{n}(t, \mathbf{X})]$, where $w^{g}(ysm, t, \mathbf{X})$ is the average earnings of immigrants from source area g in year t who have background characteristics $\mathbf{X}$ (age and gender) and have lived in Finland for ysm years; $w^{n}(t, \mathbf{X})$ is the average earnings of natives with the same background characteristics $\mathbf{X}$ in the same year t, and the weights $\theta^{g}(ysm, t, \mathbf{X}) = N^{g}(ysm, t, \mathbf{X}) / N^{g}(ysm)$ are the share of immigrants from source area g in year t with characteristics x out of all immigrants from this source area observed in their ysm^{th} year in Finland. Bootstrapped standard errors (in parentheses) are calculated using 100 replications using data for a random sample of 10% of natives and the full population of immigrants. Data source: see section 4.

7. Benefits

I now turn to documenting differences in the use of social benefits. I measure benefits as the equivalence-scaled sum of all income transfers received by the immigrant and her family members during a calendar year.[8] I take this measurement approach because two important benefits – housing allowance and social assistance – are targeted at households rather than individuals. In comparison to the measurement of earnings, another difference is that the data include information on benefits only for the years 1995–2013. Thus it is important to bear in mind that the results are not directly comparable to those reported in the previous section.

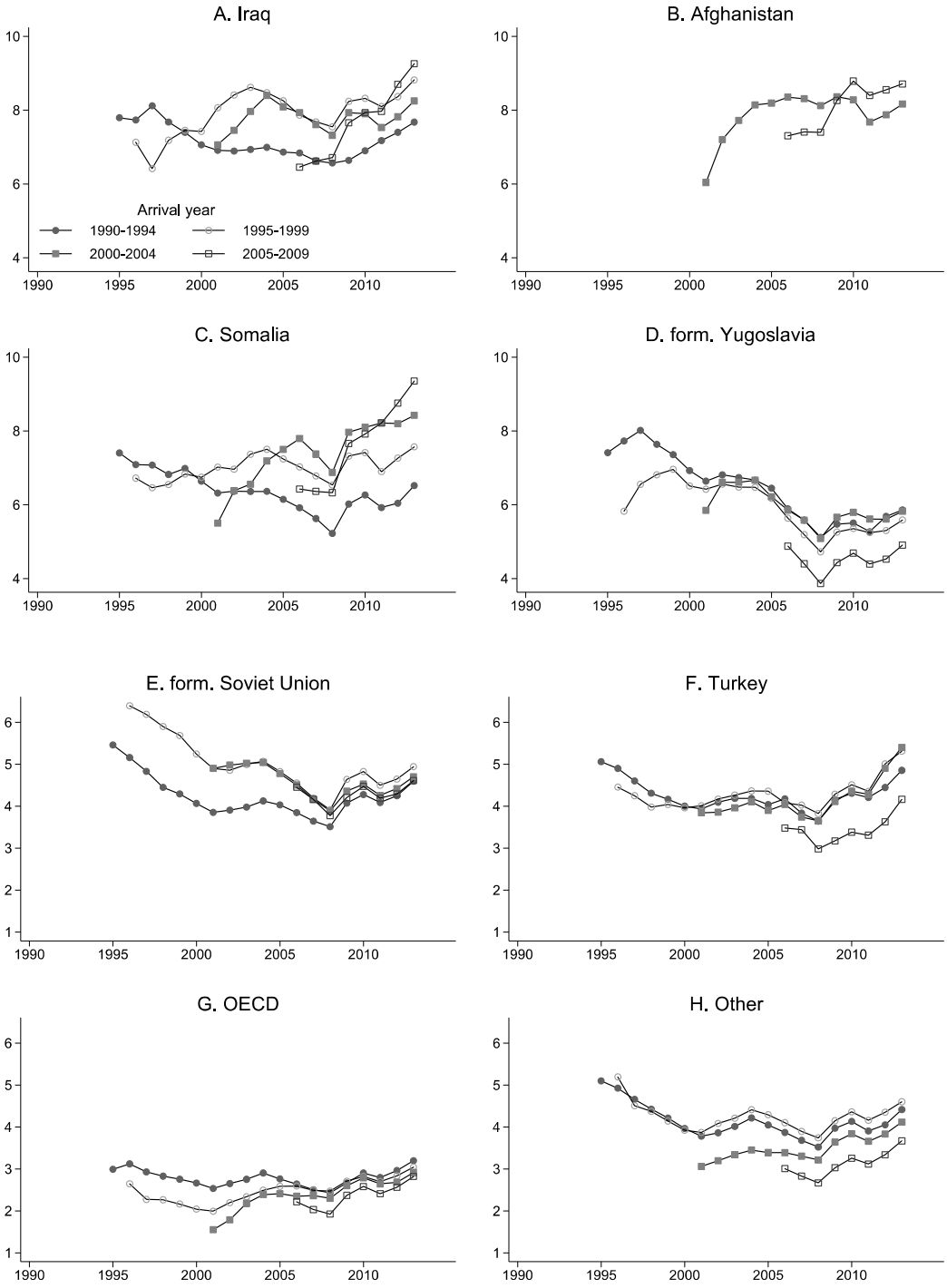
Panel D, figure 4, reports time-series for average annual benefits for the eight immigrant groups and for natives. Average benefits were highest for immigrants from Afghanistan and Iraq, and lowest for immigrants from the OECD countries. These patterns are, of course, exactly what one would expect given the differences in average earnings. However, the better labor market performance of natives was not fully reflected in their benefits. That is, native households collected more benefits, on average, than immigrants from the OECD countries and immigrants from "other" countries despite their higher average earnings. The most likely reason is that the natives are older and more often entitled to benefits determined by earlier earnings.

Figure 7 reports average benefits by arrival cohorts. The patterns for those arriving from the former Yugoslavia and Soviet Union in the 1990s mirror those for their earnings (see Figure 6). That is, their average earnings increased and benefits decreased over time. However, the average benefits received by other arrival cohorts or immigrants from other countries remained stable or even increased despite the increases in their average earnings.

Table 4 shows that immigrants' average benefits were rather stable over time lived in Finland, also in comparison to the average benefits of natives of the same age. The average equivalence-scaled benefits of households from Iraq, Afghanistan and Somalia remained at about twice the level of the benefits of natives. The relative average benefits of households of men from OECD countries increased during the first five years in Finland and remained constant at about three quarters of the level of native households thereafter. Only immigrants from the former Soviet Union experienced a steady decrease in their relative benefits over time in Finland. However, even for them, the increase in relative earnings was much steeper than the decrease in relative benefits.

[8] I use an equivalence scale which assigns a value of 1 to the first household member, 0.7 to other household members aged 15 or older, and 0.5 to each child under 15. I divide the sum of all benefits paid to household members in a given year with this scale and assign each member the same equivalence-scaled benefits.

Figure 7. Average equivalence-scaled annual benefits by country of origin and arrival cohort



Note: This figure presents time-series for equivalence-scaled annual benefits received by immigrant and his/her household for 25–60 year old individuals who immigrated at age 18 or older. Data source: see section 4.

Table 4. Relative annual equivalence scaled benefits over time lived in Finland

	Men				Women			
	1	5	10	15	1	5	10	15
Iraq	2.12	2.40	2.18	2.11	2.31	2.64	2.48	2.40
	(0.02)	(0.03)	(0.04)	(0.04)	(0.02)	(0.03)	(0.03)	(0.06)
Afghanistan	2.21	2.26	1.94	.	2.40	2.88	2.32	.
	(0.04)	(0.05)	(0.07)		(0.03)	(0.04)	(0.07)	
Somalia	2.10	1.96	1.93	1.72	2.15	2.38	2.28	2.03
	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)
Yugoslavia	1.40	1.78	1.67	1.42	1.72	2.15	1.95	1.76
(former)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.05)
Soviet Union	1.22	1.10	1.01	0.95	1.59	1.46	1.36	1.24
(former)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)
Turkey	1.09	1.07	1.20	1.24	1.33	1.58	1.63	1.61
	(0.02)	(0.02)	(0.03)	(0.03)	(0.04)	(0.04)	(0.06)	(0.08)
OECD	0.65	0.73	0.75	0.71	0.63	0.77	0.85	0.93
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.04)
Other	0.81	1.02	1.13	1.14	1.06	1.23	1.24	1.24
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
All	0.95	1.10	1.16	1.14	1.25	1.39	1.39	1.32
	(0.00)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)

Note: This table reports average relative benefits of immigrants in comparison to natives of the same age and gender (see note for Table 3 for details). Bootstrapped standard errors (in parentheses) are calculated using 100 replications using data for a random sample of 10% of natives and the full population of immigrants. Data source: see section 4.

The differences in the evolution of relative earnings and benefits are likely to reflect the complexity of the benefit system. Benefits are a function of household composition, the earnings of all members of the household (for some, but not all benefits), housing costs and so forth. Furthermore, higher earnings do not typically lead to a one-to-one reduction in benefits even in the case of single-person households. The patterns documented above highlight the importance of both labor market integration and the details of the tax and benefit systems for the fiscal impacts of immigration. However, a full investigation of the interaction between earnings and benefits is beyond the scope of this paper.

8. Conclusions

This paper presented an overview of Finland's policy response to the increase in asylum applications in 2015 and documented the employment, earnings and benefits of earlier immigrant cohorts. The two topics are closely related as the policy responses following the 2015 inflows were largely motivated by the perception that earlier refugees had not integrated well into the Finnish labor market and thus constituted a burden on public finances.

The results reported in this paper are largely in line with this view. I find that earlier cohorts of immigrants from the main source countries of the 2015 asylum seekers – Iraq, Afghanistan and Somalia – had substantially lower employment rates and average earnings and collected more social benefits than natives. While the immigrant-native gap decreased over the first decade lived in Finland, it remained substantial. Furthermore, the differences in benefits remained roughly constant despite the increase in immigrants' employment rates and earnings.

Of course, asylum seekers arriving in 2015 may differ from earlier cohorts from the same countries. Furthermore, the new approaches in integration policies that Finland is currently adopting may be more efficient than previous policies. Nevertheless, it seems reasonable to expect that also the newly arrived asylum seekers will face challenges in establishing themselves in the Finnish labor market.

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Table A1. Differences in employment rates over time lived in Finland, all immigrants vs. "stayers"

		Men				Women			
		1	5	10	15	1	5	10	15
Iraq	All	-0.71	-0.59	-0.48	-0.50	-0.69	-0.66	-0.65	-0.63
		(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
	Stayers	-0.71	-0.58	-0.47	-0.49	-0.69	-0.66	-0.64	-0.63
		(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Afghanistan	All	-0.72	-0.47	-0.38	.	-0.74	-0.66	-0.57	.
		(0.02)	(0.03)	(0.03)		(0.01)	(0.02)	(0.03)	
	Stayers	-0.73	-0.45	-0.36	.	-0.74	-0.66	-0.57	.
		(0.02)	(0.04)	(0.04)		(0.01)	(0.02)	(0.03)	
Somalia	All	-0.65	-0.57	-0.48	-0.48	-0.66	-0.66	-0.68	-0.66
		(0.01)	(0.01)	(0.01)	(0.02)	(0.00)	(0.01)	(0.01)	(0.01)
	Stayers	-0.66	-0.56	-0.45	-0.44	-0.67	-0.66	-0.67	-0.64
		(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Yugoslavia	All	-0.58	-0.41	-0.27	-0.18	-0.64	-0.58	-0.47	-0.37
(former)		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
	Stayers	-0.57	-0.38	-0.25	-0.15	-0.65	-0.58	-0.46	-0.34
		(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Soviet	All	-0.38	-0.21	-0.15	-0.12	-0.55	-0.37	-0.22	-0.17
Union		(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
(former)	Stayers	-0.40	-0.17	-0.13	-0.12	-0.56	-0.36	-0.21	-0.16
		(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)
Turkey	All	-0.30	-0.20	-0.17	-0.17	-0.61	-0.58	-0.56	-0.53
		(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.03)	(0.03)
	Stayers	-0.28	-0.17	-0.15	-0.16	-0.63	-0.59	-0.55	-0.51
		(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.03)	(0.04)
OECD	All	-0.18	-0.19	-0.14	-0.11	-0.31	-0.32	-0.26	-0.22
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
	Stayers	-0.12	-0.10	-0.10	-0.09	-0.25	-0.24	-0.22	-0.19
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Other	All	-0.32	-0.28	-0.22	-0.20	-0.45	-0.34	-0.24	-0.19
		(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)
	Stayers	-0.33	-0.23	-0.19	-0.18	-0.46	-0.32	-0.22	-0.18
		(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Everyone	All	-0.34	-0.28	-0.22	-0.20	-0.50	-0.39	-0.28	-0.23
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	Stayers	-0.36	-0.23	-0.19	-0.18	-0.52	-0.37	-0.26	-0.22
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

Note: This table reports immigrant-native employment gaps (see the note to Table 2 for details). In each panel, the top entry reports results using data for all immigrants who arrived to Finland in 1990–2002; the bottom entry reports the estimates for immigrants who stayed in Finland for at least ten years. Data source: see section 4.