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Week 8: Fiscal Effects of Immigration

- I. Basics of Public Finance and Migration
 - A. Immigrants use public services, which burdens natives.
 - B. Immigrants also pay taxes, which unburdens natives.
 - C. In countries like the U.S., the use of public services varies only moderately by income.
 1. Poor use more services targeted at the poor.
 2. But rich use more old-age programs (Social Security, Medicare) because they live much longer.
 3. Rich also use more publicly-funded higher education, because they have higher rates of college attendance.
 - D. However, the payment of taxes varies tremendously by income.
 1. Overall, the U.S. tax system is highly progressive.
 - E. Upshot: From a fiscal point of view, low-skilled immigrants are plausibly a net burden on native taxpayers, while high-skilled immigrants are plausibly a net benefit for native taxpayers.
- II. Rivalry, Age, Family, Federalism, and Immigration
 - A. Major complication: Many government services are non-rival; i.e., their cost does not depend on population.
 1. National defense
 2. Debt service
 - B. More sophisticated version: Goods are on a continuum from congested to rival to semi-rival to rival.
 1. Quick math: Divide spending by N^a to determine services' per-capita value. $a=0$ for non-rival, $0 < a < 1$ for semi-rival, $a=1$ for rival, $a > 1$ for congested.
 - C. When you're estimating the services an immigrant consumes, you therefore have to take a stand on the share of non-rival goods. With non-rival goods, immigrants can be net taxpayers even though they earn less than average, or even less than the median.
 1. It's the same as the logic of a matinee. Theaters profit by charging some customers much less than AC.
 - D. Another major complication: Fiscal burden varies heavily by age. School-age children are extremely burdensome for taxpayers, as are the elderly. Working-age people, in contrast, use few services.
 - E. Remember: Welfare states focus much more on helping kids and the elderly than helping the poor per se.
 - F. Third major complication: Immigrants come in families – and immigrant parents often have native children.
 - G. Good analyses, therefore, factor in:
 1. The cost of the services used by immigrants' children.

2. The future taxes the immigrants' children will pay.
 3. Future generations!
- H. Note: Sending countries, not receiving countries, pay for almost all the education of adult immigrants. Picture a family of 3:
1. Three natives – domestic taxpayers pay for 3 educations.
 2. Two immigrants with native child: domestic taxpayers pay for 1 education.
- I. Last complication: Federal, state, and local results widely vary, so it's important to measure "consolidated" effects.
- III. Overall, Long-Run Net Fiscal Effects
- A. In the face of all this complexity, how can we measure the *net* fiscal effect of an immigrant?
1. Key point: Most people have an opinion on the fiscal effect of immigration but have zero patience for actually looking at numbers.
- B. Easy answer: Measure the Net Present Value (NPV) of all the taxes an immigrant will ever pay minus the NPV of all the services an immigrant will ever consume.
- C. Better answer: Count the NPV of the immigrants' descendants as well. This is called the "overall, long-run net fiscal effect."
- D. Do these estimates require assumptions? Absolutely, but all assumptions are not created equal.
- E. National Academy of Sciences estimates (in \$1000s) of overall, long-run net fiscal effects, using a 75-year horizon:

FIGURE 8-23 Net Fiscal Impacts of Immigration, by Budget Scenario, Treatment of Public Goods, and Average Characteristics of New Immigrants

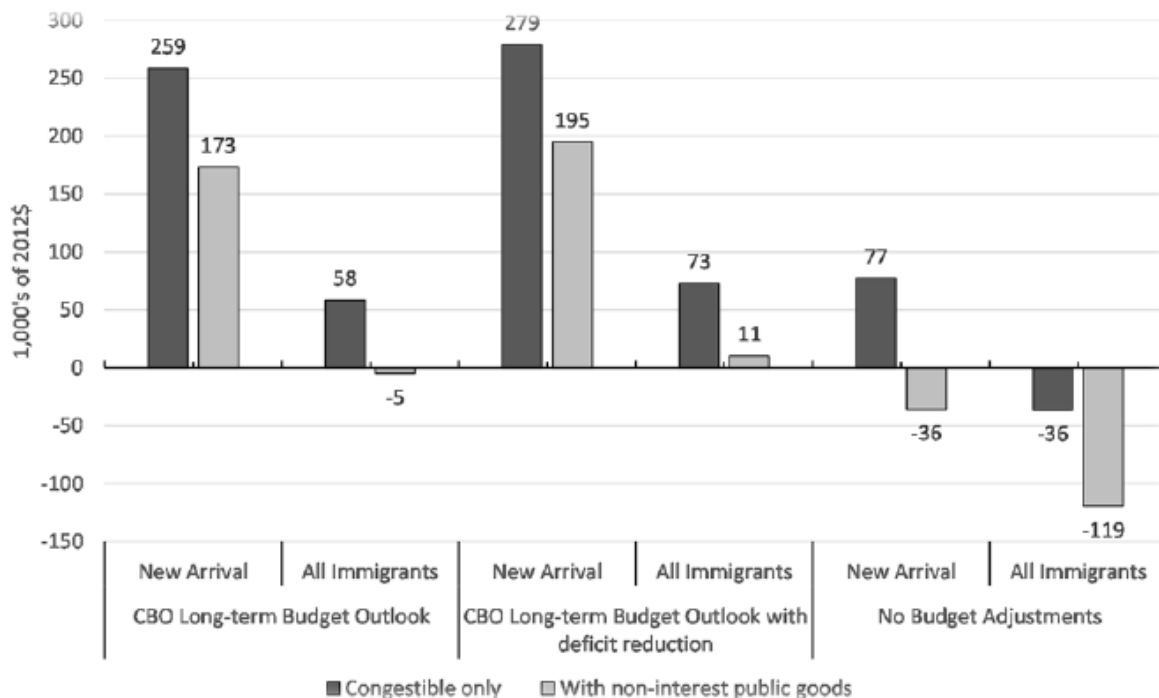


TABLE 8-14 75-year Present Value Flows for Consolidated Federal, State, and Local Governments for Three Future Budget Scenarios, by Grouped Ages of Immigrant Arrival in the United States, with Public Goods Excluded from Incremental Benefit Costs to Immigrants and Descendants (flows in thousands of 2012 dollars)

	CBO Long-term Budget Outlook												CBO Long-term Budget Outlook with Deficit Reduction												No Budget Adjustments											
	Total Impact				Immigrant				Descendants				Total Impact				Immigrant				Descendants				Total Impact				Immigrant				Descendants			
	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.	0-24	25-64	65+	Avg.
TOTAL NET																																				
<HS	35	-225	-257	-117	23	-198	-257	-109	11	-26	0	-8	56	-212	-254	-101	34	-189	-254	-99	22	-23	0	-2	-118	-231	-254	-185	-18	-176	-254	-115	-100	-55	0	-70
HS	239	-42	-164	49	140	-50	-164	11	98	8	0	39	263	-28	-162	67	153	-40	-162	22	110	13	0	45	13	-105	-170	-67	61	-70	-170	-29	-48	-36	0	-39
SomCol	401	157	-155	261	236	99	-155	155	165	58	0	106	427	174	-151	283	250	110	-151	168	178	64	0	115	117	35	-163	67	127	47	-163	78	-11	-12	0	-11
BA	495	504	-160	481	301	366	-160	330	194	138	0	150	522	525	-157	503	316	381	-157	345	206	145	0	159	172	283	-177	235	160	251	-177	210	12	32	0	25
>BA	446	994	-100	812	287	805	-100	635	159	190	0	177	472	1023	-97	840	302	826	-97	654	170	197	0	186	140	627	-120	469	143	565	-120	427	-2	63	0	42
Avg.	291	269	-201	259	177	196	-201	173	114	73	0	85	316	288	-199	279	190	209	-199	186	126	79	0	93	45	116	-206	77	82	118	-206	92	-37	-2	0	-15
TAXES																																				
<HS	778	340	38	503	382	216	38	272	396	125	0	230	791	345	38	510	388	218	38	276	404	127	0	235	514	258	37	349	283	181	37	213	231	76	0	136
HS	942	475	33	620	482	318	33	365	461	157	0	255	959	481	33	630	490	321	33	370	470	160	0	260	616	352	30	432	350	258	30	282	265	94	0	149
SomCol	1096	659	40	844	576	438	40	491	521	220	0	354	1116	668	40	858	585	443	40	498	531	225	0	361	716	479	35	576	417	348	35	372	299	130	0	205
BA	1159	978	53	1005	638	682	53	649	521	296	0	355	1181	992	53	1021	650	690	53	659	531	302	0	362	746	704	47	697	451	532	47	493	295	172	0	204
>BA	1088	1445	78	1314	618	1101	78	939	469	344	0	375	1108	1467	79	1336	629	1117	79	954	478	351	0	383	693	1025	64	909	428	827	64	695	264	198	0	214
Avg.	989	771	43	822	521	543	43	515	468	228	0	307	1007	782	43	835	530	550	43	522	477	232	0	313	643	558	39	569	375	424	39	391	268	134	0	178
BENEFITS																																				
<HS	743	565	295	619	358	414	295	381	385	151	0	238	735	556	292	611	353	407	292	375	382	149	0	236	631	489	291	534	300	358	291	328	331	131	0	206
HS	704	517	197	570	342	368	197	354	362	149	0	216	697	509	195	563	337	361	195	348	360	147	0	215	603	458	200	499	290	328	200	311	313	130	0	188
SomCol	696	501	194	583	340	340	194	336	356	162	0	247	689	494	192	576	336	333	192	330	353	161	0	246	599	444	198	509	290	301	198	293	309	142	0	216
BA	665	474	213	524	337	316	213	319	327	158	0	205	658	467	211	517	333	310	211	314	325	157	0	204	574	421	224	462	291	281	224	283	283	140	0	179
>BA	641	450	179	503	331	296	179	304	310	154	0	198	636	444	176	496	327	290	176	299	309	154	0	197	552	397	185	440	286	262	185	268	267	135	0	172
Avg.	698	502	244	563	344	347	244	342	354	154	0	221	691	494	242	556	339	341	242	336	352	153	0	220	598	442	246	491	292	307	246	299	306	135	0	192

SOURCE: The values are panel-generated using CPS data pools from 2011-2013.

NOTE: The “total” figures equal the fiscal impact of the individual immigrant plus the fiscal impacts of that individual’s descendants. See accompanying text for a discussion of the difference between scenarios without and with public goods included. The discount rate used for the NPV calculations is 3 percent.

TABLE 8-13 75-year Net Present Value Flows Comparing an Immigrant Arriving at Age 25 with a Native-born Person Followed from Age 25, for Consolidated Government Finances under Two Future Budget Scenarios, by Educational Attainment, Varying the Treatment of Public Goods (in thousands of 2012 dollars)

		CBO Long-term Budget Outlook			No Budget Adjustments		
		Total	Individual	Descendants	Total	Individual	Descendants
No Public Goods Included in Benefits							
<HS	Immigrant	-186	-109	-77	-246	-87	-159
	Native	<u>-388</u>	<u>-251</u>	<u>-137</u>	<u>-427</u>	<u>-234</u>	<u>-193</u>
	Imm-Nat	202	142	60	181	147	34
HS	Immigrant	72	49	23	-79	21	-100
	Native	<u>14</u>	<u>61</u>	<u>-47</u>	<u>-139</u>	<u>-7</u>	<u>-132</u>
	Imm-Nat	58	-12	70	60	28	32
SomCol	Immigrant	347	205	142	109	136	-27
	Native	<u>262</u>	<u>208</u>	<u>54</u>	<u>26</u>	<u>97</u>	<u>-71</u>
	Imm-Nat	85	-3	88	83	39	44
BA	Immigrant	821	514	307	433	361	72
	Native	<u>895</u>	<u>684</u>	<u>211</u>	<u>473</u>	<u>446</u>	<u>27</u>
	Imm-Nat	-74	-170	96	-40	-85	45
>BA	Immigrant	1,362	972	390	795	670	125
	Native	<u>1,344</u>	<u>1,020</u>	<u>324</u>	<u>766</u>	<u>674</u>	<u>92</u>
	Imm--Nat	18	-48	66	29	-4	33

- F. Note: “On average, recently arrived first generation independent person units (since 2006) have small net fiscal burdens relative to first generation units that have been in the United States longer because the new first generation immigrants heading the unit tend to be younger, have more education, and have fewer dependent children.”
 - G. Why makes the “No Budget Adjustments” numbers so bad? Because they assume that the U.S. keeps spending vastly more than it taxes... forever.
- IV. NPV By Skill and Age
- A. The NAS also breaks numbers down by educational and age category.
 - B. Primarily due to tax progressivity, more-educated immigrants have a better NPV.
 - C. Similarly, due to pension programs, younger immigrants have a better NPV.
 - D. *Open Borders* reports results from Table 8-14:
 1. Results by education: NPV>0 for all except HS Dropouts.
 2. Results by age: NPV>0 for all education levels for <25 years old; NPV<0 for all education levels for 65+ years old.
 - E. **Error in *Open Borders*:** Jason Richwine pointed out, and the NAS authors confirmed, that I misinterpreted the reported NPVs for <25 year old immigrants. Since most people in this category have yet to complete the education, what the NAS calls the “fiscal effect of a young high school dropout” is in fact the “fiscal effect of a *child* of high school dropout.” Many of whom will not in fact turn out to be high school dropouts!
 - F. **Corrected estimates:** NPV for *actual* 25-year-old high school dropout immigrants is actually -\$186,000. NPV for *actual* 25-year-old high school graduates is +\$72,000. (Table 8-13)
 - G. Other complications?
 - H. Biggest doubts?
 - I. While projecting the fiscal effects of liberalization using current averages is naïve, interacting sub-group estimates with estimates of post-liberalization demographics isn’t.
- V. Friedman and Open Borders: An Assessment
- A. Friedman’s quip: “You cannot simultaneously have free migration and a welfare state.”
 - B. As we’ll see later, this assumes that immigrants have to be fully eligible for welfare benefits. In high-immigration states (Gulf monarchies, Singapore), they rarely are.
 - C. Suppose, though, that immigrants *must* be treated equally. Is Friedman right then? It all depends on the numbers.
 - D. At least in the U.S., it’s unclear. Despite the existence of the welfare state, the average new immigrant more than pays for himself.
 - E. Young immigrant high school dropouts are a net negative, but young immigrant high school graduates are a net positive.
 - F. Note further: NAS estimates also show that immigrants are fiscally better than natives in all age and education categories.
 1. NPV for 25-year-old high school drop-out natives is -\$388,000!

- G. Should we conclude that: “You cannot simultaneously have free reproduction and a welfare state”?
- VI. Immigration and the Environment
- A. All else equal, higher population leads to more environmental harm.
 - 1. At first glance, however, immigration only redistributes environmental harm rather than increasing it.
 - B. Problem: Precisely because immigration increases global per-capita production and consumption, maybe it increases total environmental harm after all.
 - C. Note: If environmental harm is a good argument against immigration, it is an equally good argument against Third World development in general.
 - D. Big complication: The Environmental Kuznets Curve. Empirically, moving countries from low income to middle income *raises* measured environmental harm. Yet moving countries from middle income to high income *reduces* measured environmental harm.
 - 1. Failure to properly measure low-income environmental quality – e.g. animal waste?
 - E. Why would there be an Environmental Kuznets Curve?
 - 1. Consumer demand
 - 2. Norms
 - 3. Regulation
 - F. Key implication: If countries are going to develop anyway, the best scenario for the environment is speeding through middle income zone ASAP.
 - 1. And that’s precisely what immigration does!
- VII. Immigration and Contagious Disease
- A. “If there were no immigration, all new contagious diseases would exist in a single country.”
 - B. Not true; you’d also have to get rid of all tourism and trade as well.
 - 1. Remember: tourist contagion works two ways. It’s not enough to keep foreigners out; you have to keep domestics from travelling and then returning.
 - C. Couldn’t you allow tourism with quarantines and/or testing?
 - D. Sure, but strict, long-lasting quarantines would deter almost all tourism. Who wants to endure two three-week quarantines just to go on vacation?
 - E. In contrast, most would-be immigrants would happily endure a three-week quarantine. In you can multiply your income by a factor of 5 or 10 by migrating, a quarantine is no big deal.
 - F. Even seasonal guest workers would probably find quarantine an OK deal.
 - G. Long-run perspective: Immigration helps eradicate “diseases of poverty” – e.g. those spread by eating wild animals.