

14th International Metropolis Conference Copenhagen, 14 - 18 September 2009

USSR/FSU Immigrants to Canada

A quantitative view on immigrants' selection
and labour market performance

Don J. DeVoretz and Michele Battisti
Simon Fraser University and Metropolis BC

Presenter: Michele Battisti,
battisti@sfu.ca

September 15, 2009

- 1 Motivation
 - The change with the collapse of the Soviet Union
 - Selection
- 2 Our data
- 3 Summary Statistics and Regression Results
 - FSU immigrants in Canada
 - FSU immigrants before and after 1991
- 4 Conclusions

Our interest

- Much debate over effects of Canada's selective immigration policy
- Identification of the effects of Canada's selection is usually hard to disentangle from changes in the supply of immigrants
- Exogenous changes on the supply side allow us to investigate the role of the demand side (Canada's selection process). The collapse of the Soviet Union is one such change.

Our interest

- Much debate over effects of Canada's selective immigration policy
- Identification of the effects of Canada's selection is usually hard to disentangle from changes in the supply of immigrants
- Exogenous changes on the supply side allow us to investigate the role of the demand side (Canada's selection process). The collapse of the Soviet Union is one such change.

Our interest

- Much debate over effects of Canada's selective immigration policy
- Identification of the effects of Canada's selection is usually hard to disentangle from changes in the supply of immigrants
- Exogenous changes on the supply side allow us to investigate the role of the demand side (Canada's selection process). The collapse of the Soviet Union is one such change.

Goals of this work

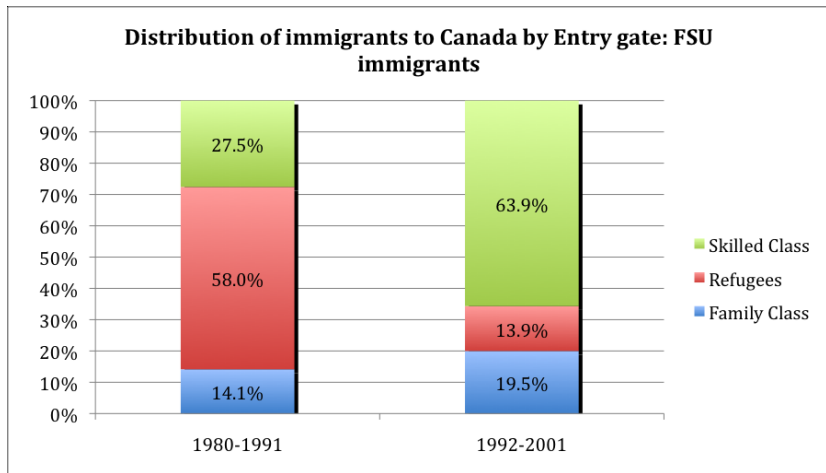
- 1 Investigate the labour market performance of USSR-born immigrants to Canada
- 2 Analyse the role of the collapse of the USSR comparing immigrants that arrived in Canada before and afterwards

Focus on employment and earnings.

Prof. Karin Amit will add details concerning certain occupations in the joint study.

USSR/FSU immigrants to Canada

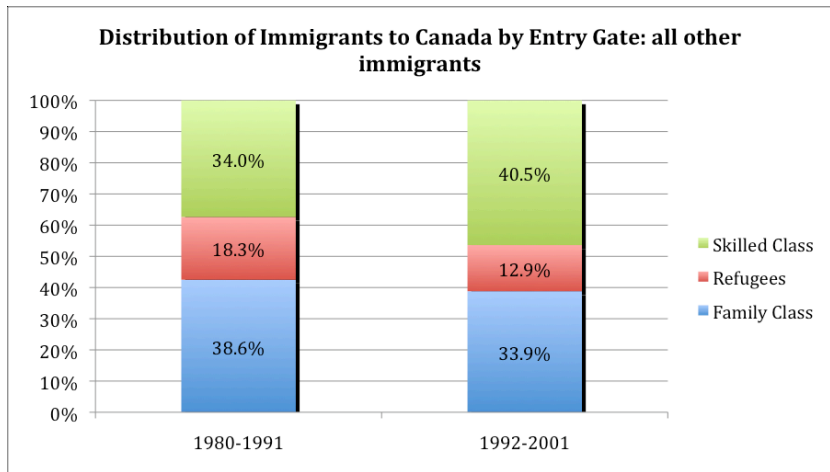
From 3/4 unscreened to 2/3 screened



Source: IMDB dataset

Other immigrants to Canada

No dramatic change



Source: IMDB dataset

Change in the selection

- Before the fall of the Soviet Union, immigrants to Canada were self-selected only, mostly refugees
- After the fall of the Soviet Union, most of them were also selected through the Canadian point system
- Can evaluate Canada's selection process by comparing the performance of immigrants entering before and after the fall of the USSR
- Is the earning gap disappearing?

Change in the selection

- Before the fall of the Soviet Union, immigrants to Canada were self-selected only, mostly refugees
- After the fall of the Soviet Union, most of them were also selected through the Canadian point system
- Can evaluate Canada's selection process by comparing the performance of immigrants entering before and after the fall of the USSR
- Is the earning gap disappearing?

Change in the selection

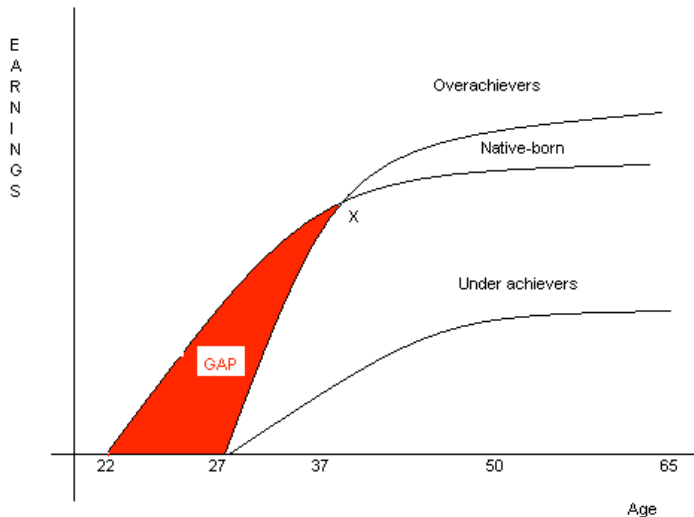
- Before the fall of the Soviet Union, immigrants to Canada were self-selected only, mostly refugees
- After the fall of the Soviet Union, most of them were also selected through the Canadian point system
- Can evaluate Canada's selection process by comparing the performance of immigrants entering before and after the fall of the USSR
- Is the earning gap disappearing?

Change in the selection

- Before the fall of the Soviet Union, immigrants to Canada were self-selected only, mostly refugees
- After the fall of the Soviet Union, most of them were also selected through the Canadian point system
- Can evaluate Canada's selection process by comparing the performance of immigrants entering before and after the fall of the USSR
- Is the earning gap disappearing?

Age-earning profiles

Different cases



Our Dataset

- IMDB dataset used for tables above, we use data from the Canadian Census
- We use the 1986, 1991, 1996 and 2001 Census
- Decision guided by large number of observations for immigrants that entered before and after 1991
- **Sample selection:** Individuals aged 20-65 at the time of the Census, so all USSR born

Our Dataset

- IMDB dataset used for tables above, we use data from the Canadian Census
- We use the 1986, 1991, 1996 and 2001 Census
- Decision guided by large number of observations for immigrants that entered before and after 1991
- **Sample selection:** Individuals aged 20-65 at the time of the Census, so all USSR born

Our Dataset

- IMDB dataset used for tables above, we use data from the Canadian Census
- We use the 1986, 1991, 1996 and 2001 Census
- Decision guided by large number of observations for immigrants that entered before and after 1991
- **Sample selection:** Individuals aged 20-65 at the time of the Census, so all USSR born

Our Dataset

- IMDB dataset used for tables above, we use data from the Canadian Census
- We use the 1986, 1991, 1996 and 2001 Census
- Decision guided by large number of observations for immigrants that entered before and after 1991
- **Sample selection:** Individuals aged 20-65 at the time of the Census, so all USSR born

Selected summary statistics

	Canadian born	USSR born
Age	39	47
Percent Married	44.9%	57.3%
Bachelor degree or higher	20.4%	42.6%
Total personal income	\$29,245	\$27,149
Wages and salaries	\$23,386	\$19,552
% Living in Toronto	10.5%	49%
Sample Size	1,068,272	3,278

All dollars values are in 2000 CAD.

Source: regression sample from 1986, 1991, 1996 and 2001 Canadian Census.

Earning regressions

Two stage model

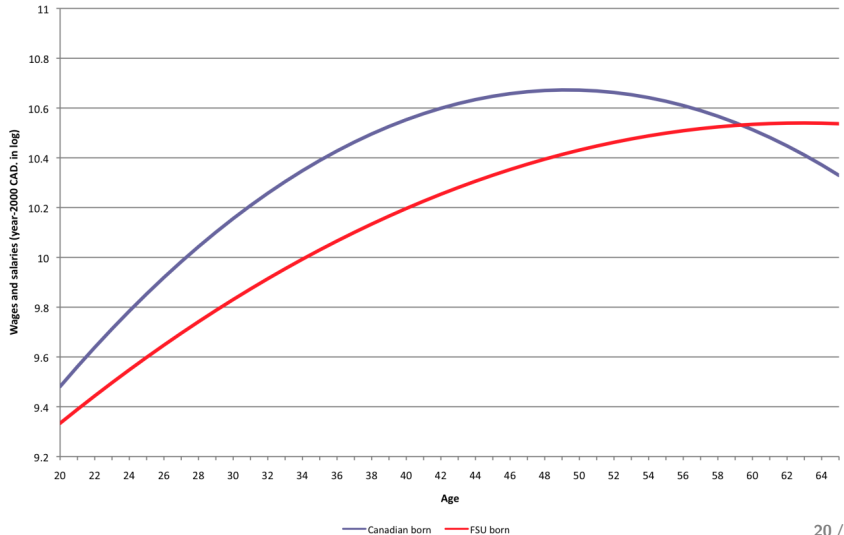
Percentage of working-age people that are employed:

	Males	Females
FSU born	59%	51%
Canadian born	79.5%	65%

Allowing for participation to be endogenous, we estimate that controlling for age, education and marital status, FSU born males earn an average **9% less than Canadian-born counterparts**, FSU born females **19% less than their Canadian-born counterparts**

Age-earning profiles

Simulations from two-stage regression



Decomposing the wage gap

A Blinder-Oaxaca technique decomposes the a gap as in the following:

$$\ln(\bar{W}_{CAN}) - \ln(\bar{W}_{FSU}) = (\bar{X}_{CAN} - \bar{X}_{FSU})\beta_{FSU} + \bar{X}_{FSU}(\beta_{CAN} - \beta_{FSU}) + (\bar{X}_{CAN} - \bar{X}_{FSU})(\beta_{CAN} - \beta_{FSU})$$

Comparing Canadian born and USSR/FSU born:

	Total	Endowments	Returns	Interaction
Total	-.01307	-.1939	.1431	.0377
Males	-.01630	-.2177	.1527	.0486
Females	-.00148	-.1582	.1237	.0330

Source: regression sample from 1986, 1991, 1996 and 2001 Canadian Census.

Selection on Observables

Educational Attainments of FSU Immigrants

	Entrance into Canada	
	Before 1991	After 1991
% Grade 9 or less	17.40	0.58
% High School dropouts	13.55	2.88
% High school/Some college	38.61	29.23
% Bachelor	17.58	32.76
% Graduate studies	12.86	34.56

Source: regression sample from 1986, 1991, 1996 and 2001 Canadian Census.

Wage equation, USSR born only

Selected estimates

Dependent variable: $\ln(w_{2000CAD})$

Variables	(1)	(2)	(3)
Entering after 1991	-0.50*** (0.04)	0.22** (0.071)	0.063 (0.099)
Age			0.118*** (0.0157)
Age ²			-0.00135*** (0.000188)
Years since immigration	No	Yes	Yes
Education	No	No	Yes
Census year FEs	No	No	Yes
Observations	3180	3180	1999

Source: regression sample from 1986, 1991, 1996 and 2001 Canadian Census.

Concluding

- Two-stage Heckman model shows USSR-born have lower participation and suffer a gap
- Most of the gap with Canadian-born arises through labour market participation, especially for males
- Consistently with the qualitative evidence, entering the labour market seems to be a more urgent problem than wages
- Comparing immigrants entering before and after the collapse of the Soviet Union: endowments improved, but returns worsened

Concluding

- Two-stage Heckman model shows USSR-born have lower participation and suffer a gap
- **Most of the gap with Canadian-born arises through labour market participation, especially for males**
- Consistently with the qualitative evidence, entering the labour market seems to be a more urgent problem than wages
- Comparing immigrants entering before and after the collapse of the Soviet Union: endowments improved, but returns worsened

Concluding

- Two-stage Heckman model shows USSR-born have lower participation and suffer a gap
- **Most of the gap with Canadian-born arises through labour market participation, especially for males**
- Consistently with the qualitative evidence, entering the labour market seems to be a more urgent problem than wages
- Comparing immigrants entering before and after the collapse of the Soviet Union: endowments improved, but returns worsened

Concluding

- Two-stage Heckman model shows USSR-born have lower participation and suffer a gap
- **Most of the gap with Canadian-born arises through labour market participation, especially for males**
- Consistently with the qualitative evidence, entering the labour market seems to be a more urgent problem than wages
- Comparing immigrants entering before and after the collapse of the Soviet Union: endowments improved, but returns worsened