1 Data

1.1 Swedish Administrative Data

The majority of the data used in the paper is Swedish administrative data accessed via Statistics Sweden (SCB). I have requested an exemption from the journal's general data policy as I am not allowed to share this data, and have never actually been in possession of the data, but worked with it via a remote access system (MONA). To apply for access, see https://www.scb.se/en/services/ordering-data-and-statistics/ordering-microdata/. When applying for data that includes at least one variable deemed "sensitive" (birth country and parental birth country in the case of this project), it is mandatory to have the research project approved by an ethics review board. In this particular case, it was approved by the Ethics Review board 3, in Lund (DNR 2015/52). To get this project approved, I agreed to the condition that I do not make any results available at the country level, but only present results related to average country characteristics. Therefore, I omit country names.

1.2 IPUMS International

The paper also uses data from IPUMS International. It is easily accessible by applying at https://uma.pop.umn.edu/ipumsi/user/new. When applying, one has to agree to the condition "Redistribution: You will not redistribute the data", hence, I am not able to share the actual data set. The list below specifies the countries and sample periods that were used for the results presented in Table 10 of the paper (the widest possible set of countries with necessary data available at the time of retrieving the data, excl. the United States).

Country	Sample
Brazil	2000, 2010
Canada	2001, 2011
Dominican Republic	2002
India	1993
Jamaica	2001
Mexico	1970, 1990, 2015
Panama	2000, 2010
Puerto Rico	1970, 2005, 2010
South Africa	1996, 2007, 2011
Trinidad and Tobago	2000
Uruguay	2006
Venezuela	2001

2 Replication

2.1 List of files included

Do Files	
AddSyssStat.do	HCMeasure_OccLayer.do
Adjust_TaskScores.do	HCMeasure_OccSplits.do
Dataset_FirmLabor_DirVarInd.do	HCMeasure_v1.do
Dataset_FirmLabor_DirVarOcc.do	Ind_NRValues.do
Dataset_FirmLabor_OccFE.do	OccSort.do
Dataset_FirmLabor_OccLayer.do	Panel_Firm.do
Dataset_FirmLabor_Splits_Ind.do	Panel_Ind.do
Dataset_FirmLabor_Splits_Occ.do	ParRegs.do
Dataset_FirmLabor.do	ParVars_PullData.do
DirVar_Aut.do	Selection.do
HC_DirVar_Ind.do	Tab1_FirmSumStats.do
HC_DirVar_Occ.do	Tab2_SumStats.do
HCMeasure_IndSplits.do	TimeInv_Ind.do
HCMeasure_OccFE.do	Weights.do
RiksArkRekMynd_PullData.do	
Data Files	
Abilities	Knowledge
MacroData_ToMona_v1	Skills
ssyk96_ssyk2012	ssyk2012_isco-08
Work Activities	Work Context

2.2 Preparatory or Complementing Steps

Different results use data from several different databases and there is no way of creating a "main" data set that contains all necessary data without it becoming unmanageable in terms of size. Do-files *Panel_Ind, Panel_Firm, ParVars_PullData, Time_Inv*, and *RiksArkRek-Mynd_PullData* essentially pulls data from databases to create a number of preliminary data sets that the other do-files use as starting points to produce the results.

2.2.1 Task-based measures

The original task-based measures on non-routinization are due to Autor, Levy, and Murname (2003). I implement the scores starting from a cross-walk provided by Wojciech Hardy, Institute for Structural Research and Faculty of Economics, University of Warsaw, and using data from the O*NET Database, collected by the U.S. Department of Labor, Employment and Training Administration.[1]

Data on interpersonal task intensity is due to Orhun Sevinc at the Central Bank of the Republic of Turkey, which he has been generous enough to share with me (reach out to

[1] See `https://ibs.org.pl/en/resources/occupation-classifications-crosswalks-from-onet-soc-to-isco/`

Orhun if you wish to use the data). In addition, cross-walks from Swedish occupational codes to isco08 (the files are *ssyk96_ssyk2012.xlsx* and *ssyk2012_isco-08.xlsx*) are available from SCB.[2]

Concretely, first run *onetsoc_to_isco_ssyk* (which creates ssyk96_12_isco08 and ssyk12_isco08), and then *Adjust_TaskScores* to generate the concrete measures of non-routinness, 'mergeable' based on the Swedish occupational code.

2.3 Results

The list below specify which do-files to run to get results used for each respective table from 1–10 in the manuscript.

T1 Run *Tab1_FirmSumStats.do*.

T2 Run *Tab1_SumStats.do*.

T3 Run *Dataset_FirmLabor*.do to create the data set, and *HCMeasure_v1.do* to produce the actual results.

T4 Run *Dataset_FirmLabor.do* to create the data set, and *HCMeasure_v1.do* to produce the actual results

T5 Run *ParVars.do* to create the data set and *ParRegs.do* to produce Table 5.

T6 Run *OccSort.do*.

T7 (a) Columns 1–4: Run *Dataset_FirmLabor_Splits_Ind.do* to create the data set and *HCMeasure_IndSplits.do* to produce results.

(b) Columns 5–8: Run *Dataset_FirmLabor_Splits_Occ.do* to create the data set and *HCMeasure_OccSplits.do* to produce results.

T8 (a) Columns 1–3: Run *Dataset_FirmLabor_DirVarInd.do* to create the data set and *HC_DirVar_Ind.do* to produce results.

(b) Columns 4–5: Run *Dataset_FirmLabor_DirVarOcc.do* to create the data set and *HC_DirVar_Occ.do* to produce results.

T9 Run *Selection.do* for the results.

[2] See `https://www.scb.se/dokumentation/klassifikationer-och-standarder/standard-for-svensk-yrkesklassificering-ssyk` under "Översättningsnycklar".

T10 (a) Columns 1–2: Run *Dataset_FirmLabor_OccFE.do* to create the data set and *HCMeasure_OccFE.do* to produce results.

(b) Columns 3–4: Run *Dataset_FirmLabor_OccLayer.do* to create the data set and *HCMeasure_OccLayer.do* to produce results.

(c) Columns 5–8: Run *IPUMS_Results.do*.

References

Autor, D. H., F. Levy, and R. J. Murnane (2003). The skill content of recent technological change: An empirical exploration. *The Quarterly Journal of Economics 118*(4), 1279–1333.

Hardy, W., R. Keister, and P. Lewandowski (2018). Educational upgrading, structural change and the task composition of jobs in europe. *Economics of Transition 26*(2), 201–231.

Sevinc, O. (2019). Interpersonal-service tasks and the change in the us employment structure. *Working Paper*.