Bloom, Jones, Van Reenen, Webb
"Are Ideas Getting Harder to Find?"
openicpsr-111743
https://www.openicpsr.org/openicpsr/project/111743/

This ReadMe file summarizes the programs and data files included in the
data repository. See the Online Appendix file IdeaPFDataAppendix.pdf for
details and replication instructions. Data sets (sources, files, and
instructions for obtaining the data) are discussed in detail in the
online appendix.

Files formats:
*.m   = matlab programs
*.mat = matlab data files
*.xls = data spreadsheets
*.csv = data CSV files

MasterIdeaPF.m: Master program for all results other than Census

Note: The first time you run MasterIdeaPF.m, most results will show up
quickly. The CompuStat data, however, gets cleaned in CompustatRead.m
and this takes ˜10 minutes, so the program will appear to pause when
that happens.

itfp.do: Stata program for Census results

Subdirectories:
   Aggregate/   = Aggregate U.S.
   Compustat/   = Compustat firm-level
   ChadMatlab/ = various general matlab functions
   MooresLaw/   = Moore's law case
   Mortality/   = Mortality rate cases
   Pharma/   = New Molecular entities case
   Seeds/   = Agriculture and seed cases
   Patents/   = Patent data used to allocate R&D in Moore's Law
   WageSci/   = Wage deflators for converting R&D into effective research

Guide to Figures and Tables

Figures are stored as *.eps files. Program output is saved in *.log
files. The appendage "_Main" is used for the main results. The appendage
"_Lambda" is used for the robustness results in Appendix Table A1.

The programs listed below should not be run individually but instead
called by MasterIdeaPF.m.

Figure 1: Subdirectory: Aggregate/
   Files: AggregateBLSIPP.m   AggregateBLSIPP2.eps

Figure 2: Subdirectory: Aggregate/
   Files: AggregateBLSIPP.m   AggregateBLSIPP.eps

Figure 3:   Subdirectory: MooresLaw/
   Files: MooresLaw.eps (from Wikipedia, as referenced in paper)

Figure 4:   Subdirectory: MooresLaw/
   Files: IntelGraph.m   IntelGraph.eps

Figure 5:   Subdirectory: Seeds/
   Files: AgIdeaPF.m   AgIdeaTFP.eps

Figure 6:   Subdirectory: Seeds/
   Files: SeedYields.m
         SeedData_Corn.eps, SeedData_Soybeans.eps, SeedData_Cotton.eps, SeedData_Wheat.eps

Figure 7:   Subdirectory: Mortality/
   Files: LifeExpectancy.m   LifeExpectancy.eps

Figure 8:   Subdirectory: Mortality/
   Files: Cancer.m   Cancer_Output.eps   Cancer_Publications
         BreastCancer.m   BreastCancer_Output.eps   BreastCancer_Publications
         HeartDisease.m   HeartDisease_Output.eps   HeartDisease_Publications

Figure 9:   Subdirectory:
   Files: Cancer.m   Cancer_TFP
         BreastCancer.m   BreastCancer_TFP
         HeartDisease.m   HeartDisease_TFP

Figure 10: Subdirectory: Compustat/
   Files: MasterCompustat.m   CompustatHist2_Sales.eps

Appendix Figure 1:   Subdirectory: Aggregate/
   Files: AggregateBLS_SciEng.m   AggregateBLS_SciEng.eps

Appendix Figure 2:   Subdirectory: Seeds/
   Files: SeedYields.m
         Yields_Corn.eps, Yields_Soybeans.eps, Yields_Cotton.eps, Yields_Wheat.eps

Appendix Figure 3:   Subdirectory: Pharma/
   Files: NMEGraph.m   NMEGraph_Output.eps

Appendix Figure 4:   Subdirectory: Pharma/
   Files: NMEGraph.m   NMEGraph_TFP.eps

Appendix Figure 5: Subdirectory: Compustat/
   Files: MasterCompustat.m   CompustatHist3_Sales.eps

Appendix Figure 6: Subdirectory: Compustat/
   Files: MasterCompustat.m   CompustatHist4_Sales.eps

Table 1:   Subdirectory: MooresLaw/
   Files: IntelGraph.m   SemiconductorTFP.m
         IntelGraph_Main.log   SemiconductorTFP_Main.log

Table 2:   Subdirectory: Seeds/
  Files: SeedYields.m   SeedYields_Main.log

Table 3:   Subdirectory: Mortality/
  Files: Cancer.m   Cancer_Main.log
        BreastCancer.m   BreastCancer_Main.log
        HeartDisease.m   HeartDisease_Main.log

Table 4:   Subdirectory: Compustat/
  Files: MasterCompustat.m
        CompustatIdeaPF_Sales_Main.log
        CompustatIdeaPF_MktCap_Main.log
        CompustatIdeaPF_Employment_Main.log
        CompustatIdeaPF_RLP_Main.log

Table 5:   Subdirectory: Compustat/
  Files: MasterCompustat.m
        CompustatIdeaPF_Sales_Main.log
        CompustatIdeaPF_RLPMinGrowth1_Main.log
        CompustatIdeaPF_Windsor1_Main.log
        CompustatIdeaPF_Robust1_Main.log
        CompustatIdeaPF_Robust2_Main.log
        CompustatIdeaPF_MedianIdeaGrowth_Main.log
        CompustatIdeaPF_UnWeighted_Main.log
        CompustatIdeaPF_DHSGrowth_Main.log

Table 6:   Files: itfp.do (Stata program run at Census Research Data Center)

Table 7:   Summary of results from earlier tables/files

Table A1:   Same programs as earlier, but with "_Lambda" instead of
        "_Main" for the *.log result files.

Appendix Table 1: Same programs as earlier, but with "_WagePlus1" instead of
        "_Main" for the *.log result files.

Appendix Table 2: Same programs as earlier, but with "_WageGDP" instead of
        "_Main" for the *.log result files.