



World KLEMS database for US: sources and notes

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The World KLEMS dataset for the US is an adaptation from the database on U.S. productivity growth by industry created by Dale Jorgenson and associates. This new data set covers data for the period 1947-2010 and uses the North American Industry Classification System (NAICS). Previous industry-level data sets on U.S. productivity provided by Jorgenson, Gollop, and Fraumeni (1987) and Jorgenson, Ho, and Stiroh (2005) have used the Standard Industrial Classification (SIC). The U.S. statistical system has shifted gradually to NAICS, beginning with the Business Census of 1997. The national accounts converted to NAICS in the 2003 Comprehensive Revision of the National Income and Product Accounts. The new database is described in the paper [A Prototype Industry-Level Production Account for the United States, 1947-2010](#) by Dale W. Jorgenson, Mun Ho and Jon Samuels, presented at the second World KLEMS conference held in August 2012. A [data appendix](#) to this paper is available with notes on construction of this dataset.

To allow for easy comparisons with the data for the countries provided in the EU KLEMS database, this US data set has been mapped into the 31 ISIC Rev. 3 (NACE Rev. 1) industries used in the EU KLEMS releases until 2011. This NAICS-NACE mapping has been made in a one-to-one fashion (concordance table available upon request). Most industries could be easily matched, but in particular trade services (e.g. automotive sales and repairs) and business services (e.g. management of companies) the matching is incomplete. In future work this bridging will be improved.

A Value Added (VA) growth decomposition is presented in this WorldKLEMS dataset, but data on the use of Energy (E), Materials (M) and Services (S) is also available. The appendix table at the end of this document shows the mapping the intermediate use by industry to the EMS categories. This list features a 'Noncomparable imports' industry which has been allocated to the intermediate use of Services since these are mostly foreign port services. No separate VA deflator (P) was included in the data, so these series have been implicitly derived from the Gross Output (GO) and Intermediate Inputs (II) deflators according to:

$$dP_{VA} = dP_{GO} \frac{\overline{GO}}{\overline{VA}} - dP_{II} \frac{\overline{II}}{\overline{VA}}$$

Where d indicates a logarithmic growth rates and \bar{x} a period average.

Appendix Table

Number	Industry Description	Code (ISIC Rev. 3)	EMS
1	AGRICULTURE, HUNTING, FORESTRY AND FISHING	AtB	Materials
2	MINING AND QUARRYING	C	Energy
3	FOOD , BEVERAGES AND TOBACCO	15t16	Materials
4	TEXTILES, TEXTILE , LEATHER AND FOOTWEAR	17t19	Materials
5	WOOD AND OF WOOD AND CORK	20	Materials
6	PULP, PAPER, PAPER , PRINTING AND PUBLISHING	21t22	Materials
7	Coke, refined petroleum and nuclear fuel	23	Energy
8	Chemicals and chemical products	24	Materials
9	Rubber and plastics	25	Materials
10	OTHER NON-METALLIC MINERAL	26	Materials
11	BASIC METALS AND FABRICATED METAL	27t28	Materials
12	MACHINERY, NEC	29	Materials
13	ELECTRICAL AND OPTICAL EQUIPMENT	30t33	Materials
14	TRANSPORT EQUIPMENT	34t35	Materials
15	MANUFACTURING NEC; RECYCLING	36t37	Materials
16	ELECTRICITY, GAS AND WATER SUPPLY	E	Energy
17	CONSTRUCTION	F	Materials
18	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of fuel	50	Services
19	Wholesale trade and commission trade, except of motor vehicles and motorcycles	51	Services
20	Retail trade, except of motor vehicles and motorcycles; repair of household goods	52	Services
21	HOTELS AND RESTAURANTS	H	Services
22	TRANSPORT AND STORAGE	60t63	Services
23	POST AND TELECOMMUNICATIONS	64	Services
24	FINANCIAL INTERMEDIATION	J	Services
25	Real estate activities	70	Services
26	Renting of m&eq and other business activities	71t74	Services
27	PUBLIC ADMIN AND DEFENCE; COMPULSORY SOCIAL SECURITY	L	Services
28	EDUCATION	M	Services
29	HEALTH AND SOCIAL WORK	N	Services
30	OTHER COMMUNITY, SOCIAL AND PERSONAL SERVICES	O	Services
31	PRIVATE HOUSEHOLDS WITH EMPLOYED PERSONS	P	Services
32	Noncomparable imports	NCI	Services