## Appendix

# Forecasting GDP at the regional level with many predictors 

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Table 1: Indicators, Acronyms and Transformations

| Acronym | Indicator | Multi | Lag | Transformation |
| :---: | :---: | :---: | :---: | :---: |
| Target Variables |  |  |  |  |
| GDPBW | GDP - Baden-Württemberg |  | 2 | 1 |
| GDPSAX | GDP - Free State of Saxony |  | 3 | 1 |
| GDPEG | GDP - Eastern Germany |  | 3 | 1 |
| Macroeconomic Variables |  |  |  |  |
| IPTOT | industrial production (IP): total (incl. construction) | X | 1.5 | 1 |
| IPCON | IP construction: total | X | 1.5 | 1 |
| IPENY | IP energy supply: total | X | 1.5 | 1 |
| IPMQU | IP manufacturing: mining and quarrying | X | 1.5 | 1 |
| IPMAN | IP manufacturing: total | X | 1.5 | 1 |
| IPCAP | IP manufacturing: capital goods | X | 1.5 | 1 |
| IPCONDUR | IP manufacturing: consumer durables | X | 1.5 | 1 |
| IPCONNDUR | IP manufacturing: consumer non-durables | X | 1.5 | 1 |
| IPINT | IP manufacturing: intermediate goods | X | 1.5 | 1 |
| IPCONG | IP manufacturing: consumer goods | X | 1.5 | 1 |
| IPCHEM | IP manufacturing: chemicals | X | 1.5 | 1 |
| IPMET | IP manufacturing: basic metals | X | 1.5 | 1 |
| IPMECH | IP manufacturing: mechanical engineering | X | 1.5 | 1 |
| IPMOT | IP manufacturing: motor vehicles, trailers | X | 1.5 | 1 |
| IPEGS | IP manufacturing: energy, gas etc. supply | X | 1.5 | 1 |
| IPVEM | IP manufacturing: motor vehicles, trailers etc. | X | 1.5 | 1 |
| TOCON | turnover (TO): construction | X | 1.5 | 1 |
| TOMQD | TO: mining and quarrying, domestic |  | 1.5 | 1 |
| TOMQF | TO: mining and quarrying, foreign |  | 1.5 | 1 |
| TOMAND | TO: manufacturing total, domestic |  | 1.5 | 1 |
| TOMANF | TO: manufacturing total, foreign |  | 1.5 | 1 |
| TOCAPD | TO: capital goods, domestic |  | 1.5 | 1 |
| TOCAPF | TO: capital goods, foreign |  | 1.5 | 1 |
| TOCONDURD | TO: consumer durables, domestic |  | 1.5 | 1 |
| TOCONDURF | TO: consumer durables, foreign |  | 1.5 | 1 |
| TOCONNDURD | TO: consumer non-durables, domestic |  | 1.5 | 1 |
| TOCONNDURF | TO: consumer non-durables, foreign |  | 1.5 | 1 |
| TOINTD | TO: intermediate goods, domestic |  | 1.5 | 1 |
| TOINTF | TO: intermediate goods, foreign |  | 1.5 | 1 |
| TOCONGD | TO: consumer goods, domestic |  | 1.5 | 1 |
| TOCONGF | TO: consumer goods, foreign |  | 1.5 | 1 |
| TOCEOD | TO: computer, electronic and optical products, domestic |  | 1.5 | 1 |
| TOCEOF | TO: computer, electronic and optical products, foreign |  | 1.5 | 1 |
| TOCHEMD | TO: chemicals, domestic |  | 1.5 | 1 |
| TOCHEMF | TO: chemicals, foreign |  | 1.5 | 1 |
| TOMECHD | TO: mechanical engineering, domestic |  | 1.5 | 1 |
| TOMECHF | TO: mechanical engineering, foreign |  | 1.5 | 1 |
| TOVEMD | TO: motor vehicles, trailers etc., domestic |  | 1.5 | 1 |
| TOVEMF | TO: motor vehicles, trailers etc., foreign |  | 1.5 | 1 |
| TOEGSD | TO: energy, gas etc. supply, domestic |  | 1.5 | 1 |
| TOEGSF | TO: energy, gas etc. supply, foreign |  | 1.5 | 1 |
| NOCON | new orders (NO): construction | X | 1.5 | 1 |
| NOMANTOT | NO: manufacturing total | X | 1.5 | 1 |
| NOMANTOTD | NO: manufacturing total, domestic | X | 1.5 | 1 |
| NOMANTOTF | NO: manufacturing total, foreign | X | 1.5 | 1 |
| NOMANCAP | NO: capital goods | X | 1.5 | 1 |
| NOMANCAPD | NO: capital goods, domestic | X | 1.5 | 1 |
| NOMANCAPF | NO: capital goods, foreign | X | 1.5 | 1 |
| NOMANCONG | NO: consumer goods | X | 1.5 | 1 |
| NOMANCONGD | NO: consumer goods, domestic | X | 1.5 | 1 |
| NOMANCONGF | NO: consumer goods, foreign | X | 1.5 | 1 |
| NOMANINT | NO: intermediate goods | X | 1.5 | 1 |
| NOMANINTD | NO: intermediate goods, domestic | X | 1.5 | 1 |
| NOMANINTF | NO: intermediate goods, foreign | X | 1.5 | 1 |
| NOCHEMD | NO: chemicals, domestic | X | 1.5 | 1 |
| NOCHEMF | NO: chemicals, foreign | X | 1.5 | 1 |
| NOMECHD | NO: mechanical engineering, domestic | X | 1.5 | 1 |
| NOMECHF | NO: mechanical engineering, foreign | X | 1.5 | 1 |
| NOVEMD | NO: motor vehicles, trailers etc., domestic | X | 1.5 | 1 |
| NOVEMF | NO: motor vehicles, trailers etc., foreign | X | 1.5 | 1 |
| NOCEOD | NO: computer, electronic and optical products, domestic | X | 1.5 | 1 |
| NOCEOF | NO: computer, electronic and optical products, foreign | X | 1.5 | 1 |
| CONEMPL | construction: total employment |  | 1.5 | 1 |
| CONTOT | construction: permits issued, total |  | 1.5 | 1 |
| CONHOPE | construction: housing permits issued for building |  | 2 | 1 |
| CONNREPE | construction: non-residential permits |  | 2 | 1 |
| CONBPGTOT | construction: building permits granted, total |  | 2 | 1 |
| CONBPGHO | construction: building permits granted, new homes |  | 2 | 1 |
|  |  |  | Con | ued on next page... |

Table 1: Indicators, Acronyms and Transformations - continued


Table 1: Indicators, Acronyms and Transformations - continued

| Acronym | Indicator | Multi | Lag | Transformation |
| :---: | :---: | :---: | :---: | :---: |
| WSLMANHOU | WSL: manufacturing, basis: hours |  | 1.5 | 1 |
| WSLMANMTH | WSL: manufacturing, basis: monthly |  | 1.5 | 1 |
| Surveys |  |  |  |  |
| ZEWPS | ZEW: present economic situation | X | 0 | 0 |
| ZEWES | ZEW: economic sentiment indicator | X | 0 | 0 |
| IFOBCIT | Ifo business climate industry and trade, index | X | 0 | 0 |
| IFOBEIT | Ifo: business expextations industry and trade, index | X | 0 | 0 |
| IFOBSIT | Ifo: assessment of business situation industry and trade, index | X | 0 | 0 |
| IFOBCMAN | Ifo: business climate manufacturing, index | X | 0 | 0 |
| IFOBEMAN | Ifo: business expextations manufacturing, index | X | 0 | 0 |
| IFOBSMAN | Ifo: assessment of business situation manufacturing, index | X | 0 | 0 |
| IFOEXEMAN | Ifo: export expectations next 3 months manufacturing, balance | X | 0 | 0 |
| IFOOOHMAN | Ifo: orders on hand manufacturing, balance | X | 0 | 0 |
| IFOFOOHMAN | Ifo: foreign orders on hand manufacturing, balance | X | 0 | 0 |
| IFOIOFGMAN | Ifo: inventory of finished goods manufacturing, balance | X | 0 | 0 |
| IFOBCCAP | Ifo: business climate capital goods, balance | X | 0 | 0 |
| IFOBECAP | Ifo: business expectations capital goods, balance | X | 0 | 0 |
| IFOBSCAP | Ifo: assessment of business situation capital goods, balance | X | 0 | 0 |
| IFOBCCONDUR | Ifo: business climate consumer durables, balance | X | 0 | 0 |
| IFOBECONDUR | Ifo: business expectations consumer durables, balance | X | 0 | 0 |
| IFOBSCONDUR | Ifo: assessment of business situation consumer durables, balance | X | 0 | 0 |
| IFOBCCONNDUR | Ifo: business climate consumer non-durables, balance | X | 0 | 0 |
| IFOBECONNDUR | Ifo: business expectations consumer non-durables, balance | X | 0 | 0 |
| IFOBSCONNDUR | Ifo: assessment of business situation consumer non-durables, balance | X | 0 | 0 |
| IFOBCINT | Ifo: business climate intermediate goods, balance | X | 0 | 0 |
| IFOBEINT | Ifo: business expectations intermediate goods, balance | X | 0 | 0 |
| IFOBSINT | Ifo: assessment of business situation intermediate goods, balance | X | 0 | 0 |
| IFOBCCONG | Ifo: business climate consumer goods, balance | X | 0 | 0 |
| IFOBECONG | Ifo: business expectations consumer goods, balance | X | 0 | 0 |
| IFOBSCONG | Ifo: assessment of business situation consumer goods, balance | X | 0 | 0 |
| IFOBCCON | Ifo: business climate construction, index | X | 0 | 0 |
| IFOBECON | Ifo: business expectations construction, index | X | 0 | 0 |
| IFOBSCON | Ifo: assessment of business situation construction, index | X | 0 | 0 |
| IFOOOHCON | Ifo: orders on hand construction, balacne | X | 0 | 0 |
| IFOUNFWCON | Ifo: unfavourable weather situation | X | 0 | 0 |
| IFOBCWT | Ifo business climate wholesale trade, index | X | 0 | 0 |
| IFOBEWT | Ifo: business expextations wholesale trade, index | X | 0 | 0 |
| IFOBSWT | Ifo: assessment of business situation wholesale trade, index | X | 0 | 0 |
| IFOAOIWT | Ifo: assessment of inventories wholesale trade, balance | X | 0 | 0 |
| IFOEOAWT | Ifo: expect. with regard to order activity next 3 months WT, balance | X | 0 | 0 |
| IFOBCRS | Ifo business climate retail sales, index | X | 0 | 0 |
| IFOBERS | Ifo: business expextations retail sales, index | X | 0 | 0 |
| IFOAOIRS | Ifo: assessment of inventories retail sales, balance | X | 0 | 0 |
| IFOEOARS | Ifo: expect. with regard to order activity next 3 months RS, balance | X | 0 | 0 |
| GFKBCE | GfK consumer survey (GfK): business cycle expectations | X | 0 | 0 |
| GFKIE | GfK: income expectations | X | 0 | 0 |
| GFKWTB | GfK: willingness to buy | X | 0 | 0 |
| GFKPL | GfK: prices over the last 12 months | X | 0 | 0 |
| GFKPE | GfK: prices over the next 12 months | X | 0 | 0 |
| GFKUE | GfK: unemployment situation over next 12 months | X | 0 | 0 |
| GFKFSL | GfK: financial situation over the last 12 months | X | 0 | 0 |
| GFKFSE | GfK: financial situation over the next 12 months | X | 0 | 0 |
| GFKESL | GfK: economic situation over the last 12 months | X | 0 | 0 |
| GFKESE | GfK: economic situation over the next 12 months | X | 0 | 0 |
| GFKMPP | GfK: major purchases at present | X | 0 | 0 |
| GFKMPE | GfK: major purchases over the next 12 months | X | 0 | 0 |
| GFKSP | GfK: savings at present | X | 0 | 0 |
| GFKSE | GfK: savings over the next 12 months | X | 0 | 0 |
| GFKCCI | GfK: consumer confidence, index | X | 0 | 0 |
| GFKCCC | GfK: consumer confidence climate, balance | X | 0 | 0 |
| GFKCCIN | GfK: consumer confidence indicator | x | 0 | 0 |
| EUCSUE | EU consumer survey (EUCS): unemploy. expect. over next 12 months | X | 0 | 0 |
| EUCSFSP | EUCS: statement on financial situation | X | 0 | 0 |
| EUCSCCI | EUCS: consumer confidence indicator | X | 0 | 0 |
| EUCSESI | EUCS: economic sentiment indicator | X | 0 | 0 |
| EUBSPTIND | EU business survey (EUBS): prod. trends recent month, industry | X | 0 | 0 |
| EUBSOBLIND | EUBS: assessment of order-book levels, industry | X | 0 | 0 |
| EUBSEXOBLIND | EUBS: assessment of export oder-books level, industry | X | 0 | 0 |
| EUBSSFGIND | EUBS: assessment of stocks of finished products, industry | X | 0 | 0 |
| EUBSPEIND | EUBS: production expectations for the month ahead, industry | X | 0 | 0 |
| EUBSSPEIND | EUBS: selling price expectations for the month ahead, industry | X | 0 | 0 |
| EUBSEMPEIND | EUBS: employment expectations for the month ahead, industry | X | 0 | 0 |
| EUBSINDCI | EUBS: industrial confidence indicator | X | 0 | 0 |
| EUBSSSCI | EUBS: service sector confidence indicator | X | 0 | 0 |
| EUBSRTCI | EUBS: retail trade confidence indicator | X | 0 | 0 |
|  |  |  | Cont | ued on next page... |

Table 1: Indicators, Acronyms and Transformations - continued

| Acronym | Indicator | Multi | Lag | Transformation |
| :---: | :---: | :---: | :---: | :---: |
| EUBSCONCI | EUBS: construction confidence indicator | X | 0 | 0 |
| COMBAEB | Commerzbank EarlyBird | X | 0.5 | 0 |
| International |  |  |  |  |
| BGBIS | Belgium business indicator survey, whole economy |  | 0 | 0 |
| BGBISMAN | Belgium business indicator survey, manufacturing (not smoothed) |  | 0 | 0 |
| UMCS | University of Michigan US consumer sentiment, expectations |  | 0 | 0 |
| USISMP | US ISM production |  | 0 | 0 |
| EUCSFRESI | EUCS: economic sentiment indicator, France |  | 0 | 0 |
| EUCSESESI | EUCS: economic sentiment indicator, Spain |  | 0 | 0 |
| EUCSPOESI | EUCS: economic sentiment indicator, Poland |  | 0 | 0 |
| EUCSCZESI | EUCS: economic sentiment indicator, Czech Republic |  | 0 | 0 |
| EUCSITESI | EUCS: economic sentiment indicator, Italy |  | 0 | 0 |
| EUCSUKESI | EUCS: economic sentiment indicator, United Kingdom |  | 0 | 0 |
| DJESI50 | EM Dow Jones EUROSTOXX index, benchmark 50 |  | 0 | 1 |
| DJIPRI | Dow Jones industrials, price index |  | 0 | 1 |
| SPUSSPI | Standard \& Poor's 500 stock price index |  | 0 | 1 |
| GOVBYUK | government bond yield long term, United Kingdom |  | 0 | 2 |
| GOVBYUS | government bond yield long term, United States |  | 0 | 2 |
| USIPTOT | IP: United States, total |  | 1 | 1 |
| CLIAA | OECD Composite Leading Indicator (CLI): OECD, amplitude adjusted |  | 1.5 | 0 |
| CLITR | CLI: OECD, trend restored |  | 1.5 | 1 |
| CLINORM | CLI: OECD, normalised |  | 1.5 | 0 |
| CLIASAA | CLI: Asia, amplitude adjusted |  | 1.5 | 0 |
| CLIASTR | CLI: Asia, trend restored |  | 1.5 | 1 |
| CLIASNORM | CLI: Asia, normalised |  | 1.5 | 0 |
| CLICAA | CLI: China, amplitude adjusted |  | 1.5 | 0 |
| CLICTR | CLI: China, trend restored |  | 1.5 | 1 |
| CLICNORM | CLI: China, normalised |  | 1.5 | 0 |
| CLIEUAA | CLI: Euro Area, amplitude adjusted |  | 1.5 | 0 |
| CLIEUTR | CLI: Euro Area, trend restored |  | 1.5 | 1 |
| CLIEUNORM | CLI: Euro Area, normalised |  | 1.5 | 0 |
| CLIUSAA | CLI: United States, amplitude adjusted |  | 1.5 | 0 |
| CLIUSTR | CLI: United States, trend restored |  | 1.5 | 1 |
| CLIUSNORM | CLI: United States, normalised |  | 1.5 | 0 |
| ECRTE | Euro-Coin real time estimates |  | 0 | 0 |
| Regional - Eastern Germany |  |  |  |  |
| IFOBCITEG | Ifo business climate industry and trade Eastern Germany, balance |  | 0 | 0 |
| IFOBEITEG | Ifo: business expectations industry and trade Eastern Germany, balance |  | 0 | 0 |
| IFOBSITEG | Ifo: assess. of business sit. indust. and trade Eastern Germany, balance |  | 0 | 0 |
| IFOBCMANEG | Ifo: business climate manufacturing Eastern Germany, balance |  | 0 | 0 |
| IFOBEMANEG | Ifo: business expectations manufacturing Eastern Germany, balance |  | 0 | 0 |
| IFOBSMANEG | Ifo: assessment of business sit. manufacturing Eastern Germany, balance |  | 0 | 0 |
| IFOBCCONEG | Ifo: business climate construction Eastern Germany, balance |  | 0 | 0 |
| IFOBECONEG | Ifo: business expectations construction Eastern Germany, balance |  | 0 | 0 |
| IFOBSCONEG | Ifo: assessment of business sit. construction Eastern Germany, balance |  | 0 | 0 |
| IFOEMPECONEG | Ifo: employ. expect. next 3 months constr. Eastern Germany, balance |  | 0 | 0 |
| IFOBCWTEG | Ifo business climate wholesale trade Eastern Germany, balance |  | 0 | 0 |
| IFOBEWTEG | Ifo: business expectations wholesale trade Eastern Germany, balance |  | 0 | 0 |
| IFOBSWTEG | Ifo: assessment of business situation WT Eastern Germany, balance |  | 0 | 0 |
| IFOEMPEWTEG | Ifo: employ. expect. over next 3 months WT Eastern Germany, balance |  | 0 | 0 |
| IFOBCRSEG | Ifo business climate retail sales Eastern Germany, balance |  | 0 | 0 |
| IFOBERSEG | Ifo: business expectations retail sales Eastern Germany, balance |  | 0 | 0 |
| IFOBSRSEG | Ifo: assessment of business situation RS Eastern Germany, balance |  | 0 | 0 |
| IFOEMPERSEG | Ifo: employ. expect. over next 3 months RS Eastern Germany, balance |  | 0 | 0 |
| HCNOEG | housing construction (HC): new orders Eastern Germany |  | 2.5 | 1 |
| HCWHEG | HC: working hours Eastern Germany |  | 2.5 | 1 |
| HCTOEG | HC: turnover Eastern Germany |  | 2.5 | 1 |
| ICNOEG | industry construction (IC): new orders Eastern Germany |  | 2.5 | 1 |
| ICWHEG | IC: working hours Eastern Germany |  | 2.5 | 1 |
| ICTOEG | IC: turnover Eastern Germany |  | 2.5 | 1 |
| PCNOEG | public construction (PC): new orders Eastern Germany |  | 2.5 | 1 |
| PCWHEG | PC: working hours Eastern Germany |  | 2.5 | 1 |
| PCTOEG | PC: turnover Eastern Germany |  | 2.5 | 1 |
| CONNOEG | construction: new orders Eastern Germany |  | 2.5 | 1 |
| CONTOEG | construction: turnover Eastern Germany |  | 2.5 | 1 |
| CONFIRMEG | construction: firms Eastern Germany |  | 2.5 | 1 |
| CONEMPEG | construction: employed people Eastern Germany |  | 2.5 | 1 |
| CONFEEEG | construction: fees Eastern Germany |  | 2.5 | 1 |
| IFOCUCONEG | Ifo: capacity utilization construction, Eastern Germany |  | 0 | 2 |
| CPIEG | consumer price index, Eastern Germany |  | 1 | 1 |
| IWHSITMANEG | IWH Industry Survey (IWH): business sit. manuf., Eastern Germany |  | 0 | 0 |
| IWHOLKMANEG | IWH: business outlook manufacturing, Eastern Germany |  | 0 | 0 |
| IWHSITCONEG | IWH: business situation construction, Eastern Germany |  | 0 | 0 |
| IWHOLKCONEG | IWH: business outlook construction, Eastern Germany |  | 0 | 0 |
|  |  |  | Cont | ued on next page... |

Table 1: Indicators, Acronyms and Transformations - continued

| Acronym | Indicator | Multi Lag | Transformation |
| :---: | :---: | :---: | :---: |
| Regional - Free State of Saxony |  |  |  |
| IFOBCITSAX | Ifo business climate industry and trade Saxony, balance | 0 | 0 |
| IFOBEITSAX | Ifo: business expectations industry and trade Saxony, balance | 0 | 0 |
| IFOBSITSAX | Ifo: assessment of business sit. indus. and trade Saxony, balance | 0 | 0 |
| IFOBCMANSAX | Ifo: business climate manufacturing Saxony, balance | 0 | 0 |
| IFOBEMANSAX | Ifo: business expectations manufacturing Saxony, balance | 0 | 0 |
| IFOBSMANSAX | Ifo: assessment of business sit. manufacturing Saxony, balance | 0 | 0 |
| IFOBCCONSAX | Ifo: business climate construction Saxony, balance | 0 | 0 |
| IFOBECONSAX | Ifo: business expectations construction Saxony, balance | 0 | 0 |
| IFOBSCONSAX | Ifo: assessment of business situation construction Saxony, balance | 0 | 0 |
| IFOEMPECONSAX | Ifo: employment expect. over next 3 months constr. Saxony, balance | 0 | 0 |
| IFOBCWTSAX | Ifo business climate wholesale trade Saxony, balance | 0 | 0 |
| IFOBEWTSAX | Ifo: business expectations wholesale trade Saxony, balance | 0 | 0 |
| IFOBSWTSAX | Ifo: assessment of business situation wholesale trade Saxony, balance | 0 | 0 |
| IFOEMPEWTSAX | Ifo: employment expect. over next 3 months WT Saxony, balance | 0 | 0 |
| IFOBCRSSAX | Ifo business climate retail sales Saxony, balance | 0 | 0 |
| IFOBERSSAX | Ifo: business expect. retail sales Saxony, balance | 0 | 0 |
| IFOBSRSSAX | Ifo: assessment of business situation retail sales Saxony, balance | 0 | 0 |
| IFOEMPERSSAX | Ifo: employment expect. over next 3 months RS Saxony, balance | 0 | 0 |
| NOMANSAXTOT | NO: manufacturing Saxony, total | 2.5 | 1 |
| HCNOSAX | housing construction (HC): new orders Saxony | 2.5 | 1 |
| HCWHSAX | HC: working hours Saxony | 2.5 | 1 |
| HCTOSAX | HC: turnover Saxony | 2.5 | 1 |
| ICNOSAX | industry construction (IC): new orders Saxony | 2.5 | 1 |
| ICWHSAX | IC: working hours Saxony | 2.5 | 1 |
| ICTOSAX | IC: turnover Saxony | 2.5 | 1 |
| PCNOSAX | public construction (PC): new orders Saxony | 2.5 | 1 |
| PCWHSAX | PC: working hours Saxony | 2.5 | 1 |
| PCTOSAX | PC: turnover Saxony | 2.5 | 1 |
| CONNOSAX | construction: new orders Saxony | 2.5 | 1 |
| CONWHSAX | construction: working hours Saxony | 2.5 | 1 |
| CONFIRMSAX | construction: firms Saxony | 2.5 | 1 |
| CONEMPSAX | construction: employed people Saxony | 2.5 | 1 |
| CONFEESAX | construction: fees Saxony | 2.5 | 1 |
| IFOCUCONSAX | Ifo: capacity utilization construction, Saxony | 0 | 2 |
| IFOOOHCONSAX | Ifo: orders on hand construction, Saxony | 0 | 0 |
| CPISAX | consumer price index, Saxony | 2 | 1 |
| ExVALUESAX | exports: value, Saxony | 2.5 | 1 |
| IMVALUESAX | imports: value, Saxony | 2.5 | 1 |
| Regional - Baden-Württemberg |  |  |  |
| IFOBCITBW | Ifo business climate industry and trade BW, balance | 0 | 0 |
| IFOBEITBW | Ifo: business expect. industry and trade BW, balance | 0 | 0 |
| IFOBSITBW | Ifo: assess. of busin. sit. indust. and trade BW, balance | 0 | 0 |
| IFOBCMANBW | Ifo: business climate manufacturing BW, balance | 0 | 0 |
| IFOBEMANBW | Ifo: business expect. manufacturing BW, balance | 0 | 0 |
| IFOBSMANBW | Ifo: assessment of busin. sit. manufacturing BW, balance | 0 | 0 |
| IFOBCCONBW | Ifo: business climate construction BW, balance | 0 | 0 |
| IFOBECONBW | Ifo: business expectations construction BW, balance | 0 | 0 |
| IFOBSCONBW | Ifo: assessment of business sit. construction BW, balance | 0 | 0 |
| IFOEMPECONBW | Ifo: employ. expect. next 3 months constr. BW, balance | 0 | 0 |
| IFOBCWTBW | Ifo business climate wholesale trade BW, balance | 0 | 0 |
| IFOBEWTBW | Ifo: business expectations wholesale trade BW, balance | 0 | 0 |
| IFOBSWTBW | Ifo: assessment of business situation WT BW, balance | 0 | 0 |
| IFOEMPEWTBW | Ifo: employ. expect. over next 3 months WT BW, balance | 0 | 0 |
| IFOBCRSBW | Ifo business climate retail sales BW, balance | 0 | 0 |
| IFOBERSBW | Ifo: business expectations retail sales BW, balance | 0 | 0 |
| IFOBSRSBW | Ifo: assessment of business situation RS BW, balance | 0 | 0 |
| IFOEMPERSBW | Ifo: employ. expect. over next 3 months RS BW, balance | 0 | 0 |
| NOMANBWTOTD | NO: manufacturing Baden-Württemberg, domestic | 2.5 | 1 |
| NOMANBWTOTF | NO: manufacturing Baden-Württemberg, foreign | 2.5 | 1 |
| IPMANBWTOT | IP: manufacturing Baden-Württemberg, total | 2.5 | 1 |
| HCNOBW | housing construction (HC): new orders Baden-Württemberg | 2.5 | 1 |
| HCWHBW | HC: working hours Baden-Württemberg | 2.5 | 1 |
| HCTOBW | HC: turnover Baden-Württemberg | 2.5 | 1 |
| ICNOBW | industry construction (IC): new orders Baden-Württemberg | 2.5 | 1 |
| ICWHBW | IC: working hours Baden-Württemberg | 2.5 | 1 |
| ICTOBW | IC: turnover Baden-Württemberg | 2.5 | 1 |
| PCNOBW | public construction (PC): new orders Baden-Württemberg | 2.5 | 1 |
| PCWHBW | PC: working hours Baden-Württemberg | 2.5 | 1 |
| PCTOBW | PC: turnover Baden-Württemberg | 2.5 | 1 |
| CONNOBW | construction: new orders Baden-Württemberg | 2.5 | 1 |
| CONWHBW | construction: working hours Baden-Württemberg | 2.5 | 1 |
| CONFIRMBW | construction: firms Baden-Württemberg | 2.5 | 1 |
| CONEMPBW | construction: employed people Baden-Württemberg | 2.5 | 1 |
| CONFEEBW | construction: fees Baden-Württemberg | 2.5 | 1 |

## Table 1: Indicators, Acronyms and Transformations - continued

| Acronym | Indicator | Multi | Lag |
| :--- | :--- | :---: | :---: |
| IFOCUCONBW | Ifo: capacity utilization construction, Baden-Württemberg | 0 | 1 |
| CPIBW | consumer price index, Baden-Württemberg | 2 |  |
| KIBW | business cycle indicator of Baden-Württemberg | 1 |  |
| Note: $0=$ three-month-average in levels; $1=$ three-month-average and qoq growth rate; $2=$ three-month-average and first difference. |  |  |  |

$\mathbf{X}$ indicates that the particular indicator is used for multi-indicator models

