



TECHNICAL DOCUMENTATION

**MICRODATABASE DIRECT INVESTMENT – MiDI
A BRIEF GUIDE**

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MICRODATABASE DIRECT INVESTMENT – MIDI

A BRIEF GUIDE

1 Introduction

1.1 General information

The Bundesbank has been collecting annual statistics on foreign direct investment stocks in accordance with the provisions of the Foreign Trade and Payments Regulation (Außenwirtschaftsverordnung) since 1976. Before then, the only way to obtain data on the German economy's international capital links had been by summarising transactions, such as those contained in the balance of payments statistics. However, this limited the ability to determine the structure and scope of foreign direct investment stocks. Reliable results concerning the type and extent of international capital links were only obtained once stocks of direct and indirect investment by non-residents in Germany and by residents in foreign economic territories were recorded systematically.

This document contains the technical information required to comprehend the database and therefore finally enables researchers to work with the MIDI.^ξ

1.2 Reporting requirement

The reporting procedure and data that must be reported for the direct investment stock statistics is stipulated in section 56a and 56b (Residents' assets in foreign economic territories) and section 58a and 58b (Non-residents' assets in the economic territory) of the Foreign Trade and Payments Regulation. Since September 1989, the reporting forms have been structured in line with the 1985 Accounting and Reporting Law (Bilanzrichtliniengesetz). The reporting thresholds have been altered many times in the past.

As of reporting year	Shares or voting rights	Balance sheet total
1989	>20% (previously: ≥25%)	> DM 500,000
1993	>20%	> DM 1 million
1999	10% to less than 50%	> DM 10 million ¹
	≥50%	> DM 1 million ²
2002	≥10%	> € 3 million

Reporting requirements pursuant to sections 56a and 58a of the Foreign Trade and Payments Regulation

^ξ I would like to thank Dietmar Scholz and Beatrix Stejskal-Passler for the provision of the data, valuable comments, helpful discussions and their readiness for questions of all kinds as well as for the obligatory verifications of the research output. All errors and inaccuracies are my own.

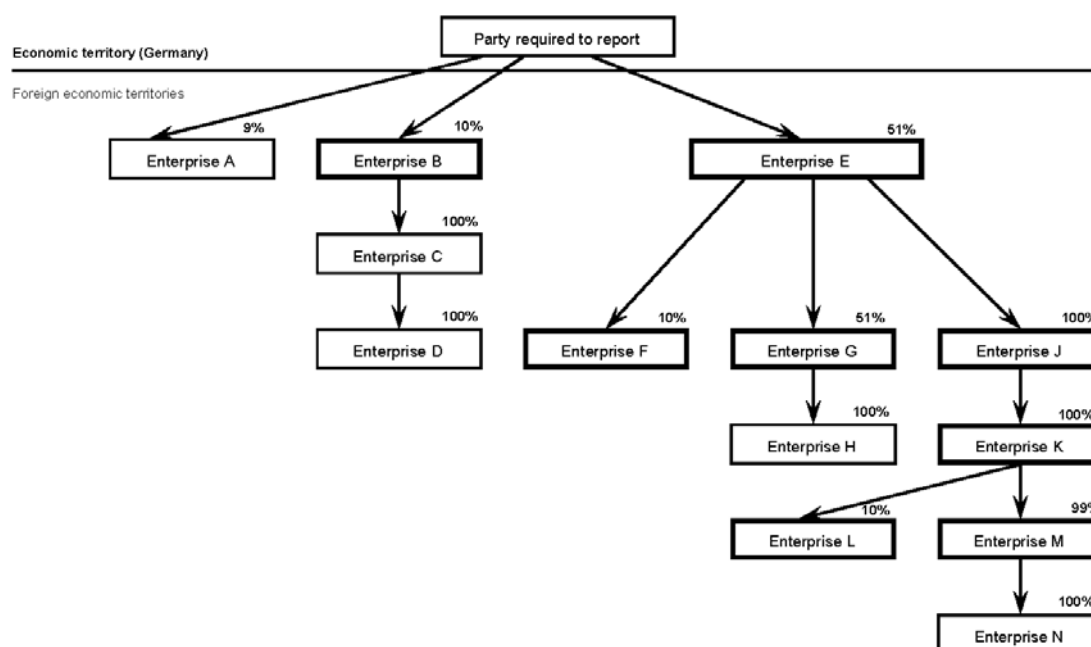
¹ €5 million as of the 2001 reporting year.

These changes mean that the number of reports due fluctuated considerably. But, since the modification of exemption limits mainly added or eliminated smaller units, the invested amounts only changed slightly.³

Since 2002, German enterprises⁴ report their international capital links if the direct investment enterprises' balance sheet total exceeds the €3 million reporting threshold. The reporting forms are available on the Bundesbank's website: <http://www.bundesbank.de/index.en.php>.

Until 2006 indirect participating interests had to be reported if a "dependent" investment enterprise⁵ had a stake of 10% or more in another enterprise. The diagram illustrates the main rules. Information on the participating interests in the enterprises in the boxes outlined in bold had to be reported; the participating interests in enterprises B and E were considered to be direct and those in enterprises F, G, J, K, L and M were considered to be indirect.

Figure 1: Reporting scheme until end of 2006:



² €500,000 as of the 2001 reporting year.

³ Internal Bundesbank investigations conducted by the department responsible for collecting data on direct investment stocks have confirmed this.

⁴ In the case of German foreign direct investment, it is the resident investors which are subject to reporting requirements; in the case of non-resident direct investors in Germany, this duty falls to the resident (direct) investment enterprises. Where indirect participating interests in Germany are affected, they are reported by the resident direct investment enterprises. To a large extent, and pursuant to the provisions currently in force, the rules governing the classification and content of reports apply equally to both sides. One significant remaining difference is that shares and voting rights held by affiliated investors from foreign economic territories are consolidated. Affiliated investors are those which have come together specifically to establish the investment enterprise, which pursue economic interests jointly by holding participating interests in one or more enterprises or who are closely related to each other (directly related by blood or marriage) or are connected with each other as defined in section 15 of the Companies Act (Aktiengesetz).

⁵ Up to 2006: A direct investment enterprise is classed as "dependent" if the investor holds more than 50% of the shares or voting rights. If a "dependent" enterprise holds a 100% participating interest in another enterprise, then this enterprise and any additional enterprise fulfilling the condition of a 100% participating interest are also regarded as "dependent".

From end of 2007 on reporting requirements have been changed with regard to **indirect** participating interests. Now all indirect majority stakes held through dependent enterprises are recorded and considered to be “dependent”, while minority stakes held through dependent enterprises are not subject to the reporting requirements any more.

The following diagrams illustrate the new reporting scheme. In principle the possibility of direct or indirect control (majority stake) drives the reporting requirements. Information on the participating interests in the enterprises in the boxes outlined in bold have to be reported. Green shaded boxes represent stakes that are now newly implied; red shaded boxes are examples for stakes that ceased to be included in the statistics.

Figure 2a: Reporting scheme German outward FDI 2007 on

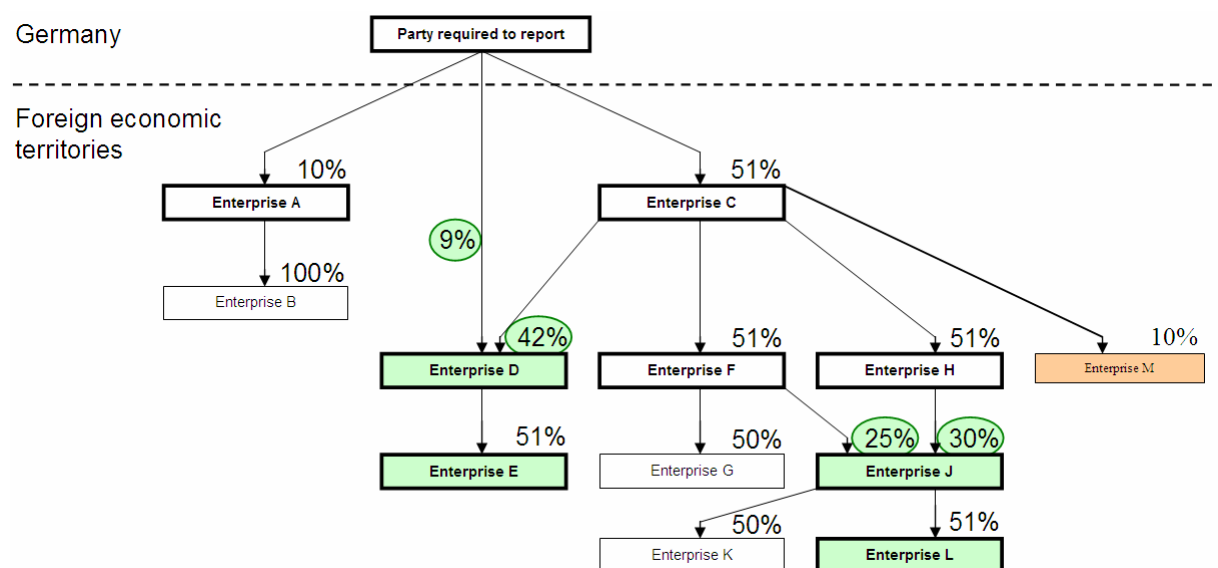
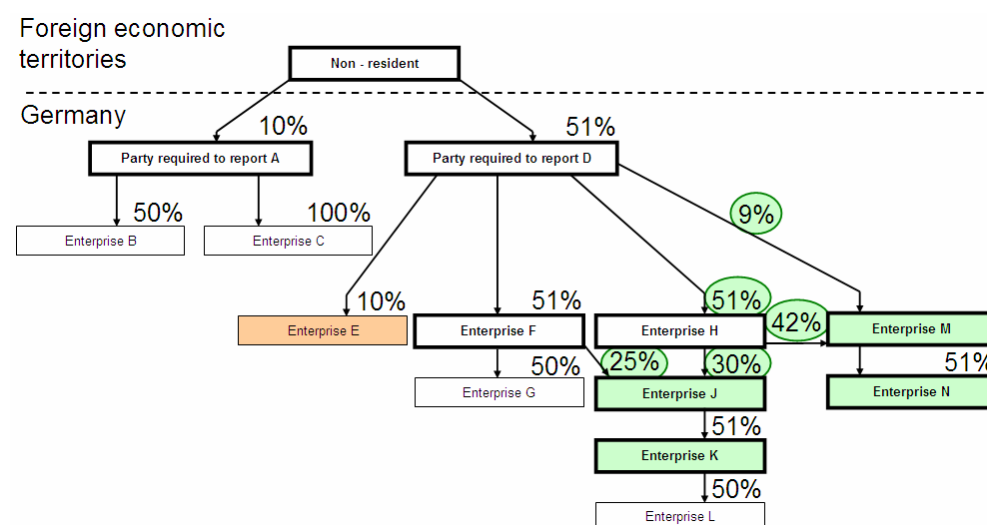


Figure 2b: Reporting scheme German inward FDI 2007 on



2 The Microdatabase

2.1 General information

There are two dimensions in the MIDI. The rows represent the individual reports (annual accounts and indicators) while the columns display the variable features noted. The MIDI includes reports from 1989 and later. Reports up to and including those from 1995 are anonymised in a way that it is impossible to track individual enterprises over time. Nevertheless, the process by which this occurs will always assign an enterprise the same notional reporting number if it occurs more than once during a year. From 1996 and later the data is anonymised as well, but companies can be traced over time using their company codes. Hence, from 1996 the MIDI is a panel dataset.

2.2 Variables

Information about the codes (variable names) used for individual variables in the database can be found in the corresponding table in the annex. The reporting forms for collecting data on foreign investment stocks are designed so that the same code generally denotes the amount in both directions (K3: outward FDI and K4: inward FDI).

When creating the database, the variable names from the “original” direct investment stock statistics have been remained. Some specialities originating from that are described below. These are offset by the opportunity to “speak the same language” as the business unit in the Statistics department responsible. Variables which are included in the reports, but which have no bearing on the scientific analysis, were removed from the database. The “Modifications” section provides more details on this and other changes to the raw data.

2.3 Specifics

Variables with the suffixes “a” and “b”

The reporting forms used for the direct investment stock statistics have three columns for balance sheet figures. The first refers to the specific investment enterprise. Column two is used to specify how much of the total (column one) should be attributed to the direct investor. In other words, it contains data regarding the direct investment enterprise. Column three only contains details of indirect participating interests. It is used to record the share of the total amounts (column one) which is attributable to the respective direct participant.

Column one contains more fields than columns two and three. If details are required, for which the data from column one are available but which do not require an entry in column two or three, these can be calculated using the appropriate capital share. If variables derived in this manner are to be assigned to column two (three) then an “a” (“b”) is appended to the variable name from column one.

Variables with the suffixes “1” and “2”

Unfortunately, there is no standard naming convention for variables with numerical suffixes. Refer to the variable list in the appendix for a more detailed description. Generally speaking, for pre-calculated variables of primary FDI (e.g. *pdu1/2*) the suffixes 1 and 2 indicate whether the DI enterprise is a dependent holding company (suffix 2) or not (suffix 1). For secondary direct investments (e.g. *pdm1/2*) they indicate whether these investments are held through dependent holding companies (suffix 1) or via non-holding companies (suffix 2).

For variables concerning legal form (*re...*), economic sector (*br...*), federal state (*lz...*) or reporting number (*nu...*), the system used is not entirely standardised. The variables for sector groups (*bgr...*) which are generated subsequently follow the pattern for sectors. On form K3, the variables ending in “1”, ie *re1*, *br1*, *bgr1*, *lz1* and *num* (not *nu1*, unfortunately) always designate the German institutions subject to reporting requirements. Variables ending in “2”, ie *re2*, *br2*, *bgr2*, *lz2* and *nu2* refer to the investment enterprise which is being reported and on which all balance sheet data in the report are therefore based.

The classification on form K4 is in complete contrast to the method used in form K3. For the direct subsidiaries of foreign enterprises, classification is a simple matter, as they are both subject to reporting requirements and investment enterprises. However, the identical number is only entered in *num* and *nu2*. Redundant entries are not used for the other variables (*re2*, *br2*, *bgr2*). In these cases, the corresponding value can only be found in *re1*, *br1* and *bgr1*. For secondary direct investment, classification on form K4 initially matches that on form K3. Details regarding (resident) institutions required to report end in “1”, those regarding the enterprise being reported end in “2”.

To create a uniform structure for analysing all investment enterprises on form K4, it must be possible to address the indirect participating interests in the same way as the direct participating interests. The assessment criterion *typ* (type) allows us to do this. Direct participating interests are classified as *typ* = 1, indirect interests as *typ* = 2. To enable us to evaluate the direct and indirect participating interests together, we swap the content of all variables for direct participating interests ending in “1” and “2”. Reports modified in this way are labeled as *typ* = 3. They are shown as if they were primary direct investments, as the investment enterprise is now reported using variables ending in “1”. Type 2⁶ is hidden for the purposes of the analysis, which is then able to treat secondary (type 3) and primary (type 1) direct investment equally. If data exist in variables ending in “2”, the report will detail an indirect participating interest and the data in the fields ending in “2” will correspond to those of the institution required to report (ie basically the resident direct investment enterprise). If there are no data in fields ending in “2” (except *nu2*), then it is a report by a primary direct investment enterprise.

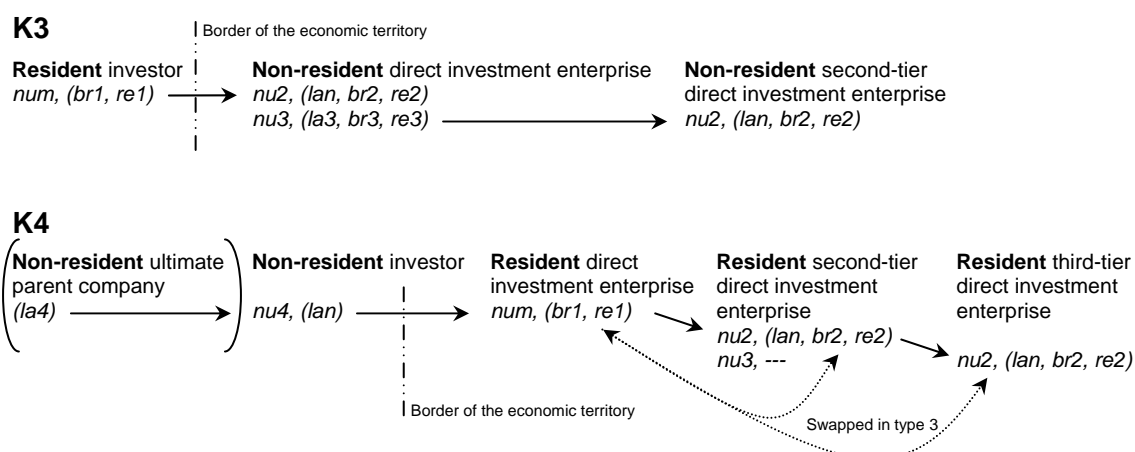
The *lan* variable

The variable *lan* denotes the country where either the investment enterprise (for German direct investment abroad) or the foreign investor (for foreign direct investment in Germany) is based.

Variables ending in “3” and “4”

Besides *nu3* (from 1999), variables ending in “3” exist only on form K3 and those ending in “4” only on form K4. The suffix “3” relates to the “third enterprise” (*re3*, *la3*, *br3*, *bgr3* and *nu3*). In the chain, this identifies the respective immediate investor (ie a second-tier subsidiary holding a participating interest in a third-tier subsidiary). Only *nu3* is used on form K4, even though it might also be useful to have details about a “third enterprise’s” legal form and the economic sector to which it belongs.

Variables ending in “4” on form K4 refer to the foreign investors (*nu4*) or their ultimate parent company (*la4*). The parent company of the foreign investor investing in Germany may be domiciled abroad. The parent company is actually behind the direct investment and therefore its home country is of interest. The value is saved in *la4*. If there is no such parent company or if it is domiciled in the same country as the parent organisation, then *lan* = *la4*.



Sector variables ending in “k”

For resident holding companies, the variables *brk* and *bgrk* denote the sector or sectoral group to which the group belongs. For example, a holding company that conducts the majority of its economic activity in insurance would be assigned to the insurance sector in *brk* and to holding companies in *br1*. Records here are still very patchy.

⁶ Type 2 reports were therefore removed from the database.

Variables ending in “d”

The database also contains variables with the suffix “d”. These are assets or liabilities which may or may not be counted as direct investment depending on how the latter is defined. Claims on and liabilities to credit institutions are generally considered a part of banking activities rather than direct investment. Because of the scale of these items, the values observed would result in a complete overestimation of direct investment stocks. Bank loans to a non-bank via a holding company are an exception and are counted as direct investment. For the reasons given, certain variables are recalculated to exclude claims on and liabilities to banks which are not classed as direct investment. This done, the new items (eg *p38d*) contain only assets or liabilities which constitute direct investment.

Consolidated balance sheets

The variable *p43* is used on form K3 to denote that there may be more than one enterprise behind the balance reported. For consolidated balance sheets such as these, values appear for item *p43* which are greater than one. When evaluating quantitative variables this value may be disregarded as it includes the total for all enterprises featured on the balance sheet. When evaluating qualitative variables, the value has to be weighted using the factor *p43* so as to take account of the firms behind the report. It is not at all clear from this whether, for example, all these firms are in fact from the same sector or if they have the same legal form. It is far from certain — indeed more than unlikely — that they are all domiciled in the same country. As such, particular caution is advisable when interpreting consolidated balance sheets.

For some reports, $p43 = 0$. There are two reasons for this. If a chain of several holding companies is reported, these corporate balance sheets are consolidated by the relevant business unit in the Statistics Department. The entry for the newly-created consolidated balance sheet under item *p43* is the original number of balance sheets; a zero is then entered for the original balance sheet (though not consistently).

In addition, the respective business unit in the Statistics Department splits up certain corporate balance sheets. This is always the case if a non-holding company reports a large number of additional secondary participating interests, whose sector or country details differ from those of the parent company. The item “shares in affiliated enterprises” (*p13*) is also an important criterion used to split up the balance sheet. The remaining non-holding company retains the original value in *p43* (generally “1”), a zero is entered in *p43* for the deducted holding company balance sheet and the balance sheet type *bil* = 0.

Variables with *k*

Direct investment enterprises in a foreign economic territory are often reported not by one resident investor, but by several. To avoid duplication, a “divisor” is included for K3 (*p45*). It

specifies the number of participating resident investors required to report. To avoid the risk of duplication mentioned above when adding specific variables (eg the number of employees *p05*), new corrected variables are constructed by dividing the value used for the original variable by the divisor.⁷ The new variable is designated by adding a “*k*” to the existing name (eg *pk05*). This process ensures that the values are distributed evenly among all investors for the purpose stated. In many cases, it is not an economic necessity and merely helps arrive at the correct sum total when adding these variables.

On form K4, the variable *p45* is used differently and *k* items are not calculated in the original database; this is because, for K4, duplication can be avoided (on the mainframe by the business unit in the Statistics Department) by checking the registration number (*num*).

2.4 Modifications

Indicator variables for K4

The *k* items described above are absent for K4. To ensure that duplicates in aggregates were also easy to exclude on the PC, two flags were added (*k4flg* und *k4flg_geo*). *k4flg* = 1 if a new resident investment enterprise reports for the first time, otherwise *k4flg* = 0. Now it is possible to avoid duplicates, for example in the number of employees, by only cumulating values such as these if *k4flg* = 1. This is not sufficient for regional assessments, as investors might come from various countries. For *k4flg_geo*, we proceed as follows: the variable takes the value 1 once for each country which is home to investors in a particular investment enterprise. In all other cases, *k4flg_geo* = 0. By so doing, the German investment enterprise's code numbers can be assigned in full to each country which is home to at least one investor. The relevant business unit in the Statistics Department follows this same procedure when conducting regional analyses.

However, aggregation using the flags is not permitted for all database variables. It may be used for all variables that have corresponding *k* items. Many variables already take account of the participation ratios (ie all variables with suffixes “*a*” and “*b*” and all variables calculated using them, such as *pdu*, *pdm1* etc).

Variables with k for K4

Besides the option of flags, the *k* items on form K4 were generated in such a way as to contain the starting item's value weighted by the respective degree of participation. It is not broken down according to the number of investors, as for K3. Instead, the proportional amount resulting from the degree of participation is always assigned to a direct investment

⁷ With the exception of *pk40*, these are multiplied by 100 in the original database. This has already been adjusted in the value used here.

enterprise's reports.⁸ This makes it possible to avoid duplication and to obtain the correct⁹ totals by adding the *k* variable values. However, *this* procedure does not make it possible to reproduce the results of the responsible business unit in the Statistics Department because it takes a different approach, as detailed above.

Use of p43 for K4

The original *p43* data from the direct investment stock statistics is not used on form K4. It was therefore possible to use *p43* to determine the number of foreign investors in the enterprise required to report for K4.¹⁰

Indicator variables for K3

Sometimes it is useful to have a flag on form K3 which only displays an investment enterprise once a year. A new variable was created for this purpose (*k3flg*). *k3flg* = 1 if a new, second report number (*nu2*) appears in the database (sorted by year and investment enterprise), otherwise *k3flg* = 0. One possible application for this flag is for queries regarding how direct investment is distributed. Examples include breaking down direct investment enterprises by size, legal form, sector etc. Simply using the initial variables would result in duplication. It is not possible to use the *k* variables either, however, as they are obtained by taking the initial values and either dividing by the divisor (K3) or multiplying by the degree of participation (K4). Using these values would, therefore, result in duplication of values that are too small.¹¹

Taking account of the "directional principle"

To allow the direct investment stocks to be calculated according to the "directional principle" (variables *dpu*, *dpum1*, *dpm1* and *dpm2*) the investment enterprise's loans to and claims on the respective institution holding the participating interest have to be deducted from the direct investment stocks as calculated according to Bundesbank criteria (*pdu*, *pdum1*, *pdm1* and *pdm2*). First, variables *p16d* and *p20d* (which are not included in the original database) must be generated, as variables *p16* and *p20* might contain interbank claims which are not regarded as direct investment.

⁸ Applies to pk04, pk05, pk08, pk11, pk12, pk22, pk23, pk29, pk30, pk31, pk32, pk40.

⁹ However, this only accounts for part of the total that is attributable to foreign investors which are required to report and which hold the participating interest in accordance with their share in the capital. As there may also be foreign capital suppliers and resident capital suppliers which are not required to report, the enterprises' figures are not always fully included when aggregating under this procedure.

¹⁰ This information is contained in p45 on form K3; on form K4, p45 is used for indirect secondary loans.

¹¹ Here is a simple example to demonstrate the problem. Assume that four investors each hold a 25% stake in an enterprise with 10,000 employees. A direct evaluation of p05 would result in the 10,000 being counted four times. Using pk05 would mean counting four lots of 2,500 employees. On aggregate, that is correct, as four times 2,500 equals 10,000. Neither of these is suitable for sorting by turnover size. The flag accesses p05 directly and only once, counting only one lot of 10,000 employees.

Reducing the storage space required

Balance sheets that cannot be evaluated are assigned the balance sheet type $bil = 0$ in the original database. These reports were deleted.¹² Reports on indirect participating interests are, as already indicated, a source of redundancy on form K4. Given that all the data on secondary direct investment exist in duplicate in the database (as type 2 and again as type 3), the initial values not required for the analysis were deleted from the database (type 2).

Variables for the degree of participation

Variables $bg1$ and $bg2$ from the original files include the degree of participation in prescribed, discrete size classes. These variables were deleted and replaced by others named bgu , bgm and bg , for which the degree of participation for primary ($bgu = p24 / p23$) and secondary ($bgm = p25 / p23$) direct investment was calculated based on the actual share in nominal capital. bgu records the investors' degrees of primary participation, bgm the direct investment enterprises' degrees of participation in the secondary (or other indirect) participating interests. The variable bg is combination of the other two variables. For direct participating interests it contains the value from bgu and for indirect participating interests that from bgm . These calculations were stopped in 2002, as the Statistics Department was able to supply more reliable values based on the initial currency (ppu and ppm). These values have been calculated retrospectively from 1996 onwards.

2.5 Direct and indirect FDI

The variable balance sheet type (bil) exists in the database to allow us to differentiate between direct, indirect and mixed FDI, between direct FDI in holding and non-holding companies and between indirect FDI between such companies via holding and non-holding companies.

Direct FDI

The only inputs used for calculating direct FDI are direct capital and credit relationships. However, direct credit relationships may also occur in indirect participating interests; for example, if the parent company circumvents its subsidiary in granting a loan to its second-tier subsidiary. These are also recorded as direct FDI, depending on how the latter is defined.¹³

¹² A version which includes these reports is available, however, and may be used.

¹³ If, however, a company is owned both directly and indirectly, the balance sheet type variable (bil) is used to determine the type of capital links and allocate the individual direct investment aggregates. A non-resident enterprise which is owned both directly in Germany and via a holding company which is dependent on Germany is assigned balance sheet type $bil=5$. If the capital is linked via a dependent non-holding, the enterprise is assigned balance sheet type $bil=6$. In such cases, only direct capital and credit relationships are regarded as direct FDI.

Indirect FDI held through dependent holding companies

The item direct FDI also includes direct investment in holding companies. These are often only founded so as to establish, take over or take an interest in other (production) enterprises in that country or other third countries. These activities by the holding company are interpreted as indirect FDI by its parent company and are recorded separately from other indirect FDI relationships. This is done so that they can be analysed together with direct FDI at a later date. In essence, the holding company is used as a conduit.

Direct and indirect FDI (consolidated)

This is the (consolidated) total of direct and indirect FDI held through holding companies. Consolidation means deducting the direct FDI attributable to the dependent holding company from total direct FDI as, otherwise, the former would be counted twice. In other words, the direct FDI in holding companies is exchanged for those companies' own investment.¹⁴ The data record contains variables (*pbum1*, *pdum1* and *dpum1*) which themselves include the consolidated total of direct FDI and indirect FDI held through dependent holding companies.¹⁵

Other (other indirect) FDI

Secondary FDI held through non-holding companies are termed "other corporate assets in foreign economic territories". This indirect FDI cannot be combined with the above mentioned consolidated sum of direct and indirect FDI because it would require consolidation of the investment relationships which, in turn, would necessitate consolidation of the entire balance sheet. That is more likely to obscure the regional and, above all, sectoral structure of direct investment relationships than to elucidate them.

2.6 Data prior to 1989

Records for direct investment stocks date back to 1976. There are two distinct types of data. Data available from 1989 onwards are standardised and systematic. They are continually maintained by the relevant business unit in the Statistics Department and updated to reflect the format of the latest reporting form. This means that for this entire period, each variable can be addressed using the same name, even if the extent of the data collected and, consequently, the way they are assigned to specific variable names has changed over time. This is not the case for data collected between 1976 and 1988. They constitute a work area in their own right which was finally discontinued by the business unit in the Statistics

¹⁴ However, this only applies to holding companies with direct participating interests which they are required to report. If a holding company is not more than 50%-owned by a resident, a dependent holding company only holds participating interests below the reporting threshold or only holds participating interests outside its own sphere of economic activity, then direct FDI in these holding companies is retained in the consolidated total.

Department in 1999. Since then, the data have not been maintained and their structure renders them incomparable with post-1988 data. One contributing factor is that the balance sheet items were weighted using the corresponding degree of participation and the reported values were then overwritten with the newly-calculated amounts. K3 data, as a consequence, did not require any “k” variables or a divisor. The data themselves, however, no longer contained any information about the total reported value.

The main difference in terms of the data is that debts to affiliated enterprises have only been included since 1989. This alone resulted in an increase in foreign participation in Germany of around DM28 billion in 1989, for example, and of DM9 billion in German participation abroad. Furthermore, prior to 1989, both forms contained values that were not assigned to a region. On form K4, this is because no country codes were recorded in the case of indirect FDI. In addition, for indirect FDI, form K4 does not distinguish between whether the direct subsidiary is a holding company or not. As a result, it is not possible to generate a consolidated total of direct and indirect FDI held through dependent holding companies for the period prior to 1989. Furthermore, the totals were not broken down precisely for mixed (indirect and direct) subsidiaries; instead this was done in steps of 0, 0.25, 0.33, 0.5, 0.67, 0.75 and 1.0.

As well as potential difficulties with implementation and comparability, the main reason for omitting data for the years 1976 – 1988 was the discontinuation of work on this particular time horizon.

3 Confidential nature of individual statistics

When evaluating the direct investment stock statistics, care must be taken to ensure the confidentiality of individual statistics. As the data has not been factually anonymised it may frequently be possible to associate the data with the individual party required to report based on parameter values as well as sector-specific and geographical characteristics. In publications, it is therefore necessary to mask values composed of fewer than three data elements. Furthermore, at least one additional component must be masked if an aggregate and all its components are to be published *and* one of the components is considered confidential for the reason outlined above. Otherwise, it would be possible to calculate the masked value by differencing. In addition, any statistical value which is dominated by a single report should also be masked. There is, however, no rule prescribing an upper limit for the preponderance of a single report in an aggregate above which the statistic should be kept confidential.

It is also necessary to consult with the relevant business unit in the Statistics Department to prevent the publication of data which had to be masked in a previous publication. As such,

¹⁵ From 2004 the consolidated sum can be calculated using an easy formula (e.g. $p_{dum1} = p_{du1} + p_{dm1}$). Before, when calculating totals using the formula $p_{dum1} = p_{du} + p_{dm1}$, it must be verified whether $bil \neq 2$ in

research papers must be presented to the relevant business unit in the Statistics Department before publication to ensure that confidential personal data have not been (accidentally) included. Generally speaking the corresponding rules issued by the Statistics Department have to be followed when working with the database. These include working with the MiDi data only on site at Bundesbank Central Office in Frankfurt and signing a formal agreement to keep individual data confidential before accessing the database.

Appendix

Calculation of FDI stock figures

	(direct)	(indirect)
<i>The direct investment stocks are calculated from the database as the total of</i>		
the attributable nominal capital share	p24	p25
<i>plus attributable share of</i>		
Capital reserves	p29a, p44	p29b, p45 ¹⁶
Revenue reserves	p30a	p30b
Profit carried forward	p31a	p31b
Profit for the financial year ¹⁷	p32a	p32b
<i>minus attributable share of</i>		
Amount not backed by own funds	p22a	p22b
Subscribed capital unpaid	p09	p10
<i>equals</i>		
Equity capital	pbu1/2	pbm1/2
<i>plus</i>		
Debts ¹⁸ to shareholders or affiliated enterprises	p38d ¹⁹ p37d ²⁰	p36d ²¹
Loan capital	--	--
<i>equals</i>		
Direct investment stock (Bundesbank method)	pdu1/2	pdm1/2
<i>minus</i>		
Loans to shareholders / affiliated enterprises / enterprises linked with the party required to report through participating interests	p15d	p16d
Claims on affiliated shareholders / enterprises and on enterprises linked with the party required to report through participating interests.	p19d	p20d
Reverse loan capital	--	--
<i>equals</i>		
Stock of direct investment (IMF/OECD method)	dpu1/2	dpm1/2

order to prevent for the above mentioned double counting.

¹⁶ Only present in the database for foreign direct investment in Germany. On the other side, variable p45 is used differently.

¹⁷ Profit for the year and balance sheet profit include other amounts that still have to be distributed. Any losses carried forward, annual losses or accumulated losses should be deducted.

¹⁸ Credit relationships between credit institutions are not included in the calculation unless they are secondary loans.

¹⁹ Direct debts from the shareholder.

²⁰ Direct debts from other affiliated enterprises outside of Germany (K4)/in Germany (K3).

²¹ Debts from dependent enterprises to other participating interests required to report.

Variables

Variable	Denotes	Label
<i>jhr</i>	Year	–
<i>art</i>	K3 / K4	art
<i>k3flg</i>	K3: 1 if new <i>nu2</i> (one per investment enterprise)	–
<i>k3flg_inl</i>	K3: 1 if new <i>num</i> (one per resident investor)	–
<i>k4flg</i>	K4: 1 if new <i>num</i> (one per investment enterprise)	–
<i>k4flg_geo</i>	K4: 1 if new <i>num</i> and new <i>lan</i> (one per country and investment enterprise)	–
<i>k4flg_ausl</i>	K4: 1 if new <i>nu4</i> (one per foreign investor)	–
<i>num</i>	Number of the party required to report	–
<i>nu2</i>	Number of the investment enterprise	–
<i>nu3</i>	Number of the 'third' enterprise (K3 and, from 1999 onwards, K4)	–
<i>nu4</i> ²²	Number of the foreign investor (K4 only)	–
<i>dpu</i> ²³	Direct FDI (directional principle);	(2004 on: <i>dpu1</i> + <i>dpu2</i>)–
<i>dpu1</i> ²⁴	2004 on: Direct FDI (dp) in non-holding companies (<i>bil</i> ≠ 2)	–
<i>dpu2</i> ²⁴	2004 on: Direct FDI (dp) in dependent holding companies (<i>bil</i> = 2)	–
<i>dpum1</i> ²⁴	Consolidated sum of FDI (dp)	(2004 on: <i>dpu1</i> + <i>dpm1</i>)–
<i>dpm1</i> ²⁴	Indirect FDI if <i>bil</i> = 3 or 5 (dp)	–
<i>dpm2</i> ²⁴	Indirect FDI if <i>bil</i> = 4 or 6 (dp)	–
<i>pdu</i>	Direct FDI	(2004 on: <i>pdu1</i> + <i>pdu2</i>)–
<i>pdu1</i>	2004 on: Direct FDI in non-holding companies (<i>bil</i> ≠ 2)	–
<i>pdu2</i>	2004 on: Direct FDI in dependent holding companies (<i>bil</i> = 2)	–
<i>p dum1</i>	Consolidated sum of FDI (BBK)	(2004 on: <i>pdu1</i> + <i>pdm1</i>)–
<i>pdm1</i>	Indirect FDI if <i>bil</i> = 3 or 5	–
<i>pdm2</i>	Indirect FDI if <i>bil</i> = 4 or 6	–
<i>pbu</i>	As <i>pdu</i> , but only participating interests (excl. loans)	(2004 on: <i>pbu1</i> + <i>pbu2</i>)–
<i>pbu1</i>	2004 on: <i>pbu</i> in non-holding companies (<i>bil</i> ≠ 2)	–
<i>pbu2</i>	2004 on: <i>pbu</i> in dependent holding companies (<i>bil</i> = 2)	–
<i>pbum1</i>	As <i>pdum1</i> , but participating interests only	(2004 on: <i>pbu1</i> + <i>pbm1</i>)–
<i>pbm1</i>	As <i>pdm1</i> , but participating interests only	–
<i>pbm2</i>	As <i>pdm2</i> , but participating interests only	–
<i>typ</i>	K4: 1=direct, 3=indirect	–
<i>bil</i>	Balance sheet type	bilanzart
<i>lan</i> ²⁴	Country of the investment enterprise (K3) / investor (K4)	land
<i>la3</i> ²⁵	Country of the 'third' enterprise (K3 only)	land
<i>la4</i> ²⁵	K4: Country of the ultimate parent	land
<i>br1</i>	Sector of the party required to report (K3) / investment enterprise (K4)	branche
<i>bgr1</i> ²⁵	Sectoral grouping of the party required to report (K3) / investment enterprise (K4)	bgr
<i>br2</i>	Sector of the investment enterprise (K3) / party required to report (K4)	branche
<i>bgr2</i> ²⁵	Sectoral grouping of the investment enterprise (K3) / party required to report (K4)	bgr
<i>br3</i>	Sector of the 'third' enterprise (K3 only)	branche
<i>bgr3</i> ²⁵	Sectoral grouping of the 'third' enterprise (K3 only)	bgr
<i>brk</i>	Sector of the German subgroup (if a holding company) ²⁵	branche
<i>bgrk</i> ²⁵	Sectoral grouping of the German group (if a holding company)	bgr
<i>re1</i>	Legal form of the party required to report (K3) / investment enterprise (K4)	rechtsform
<i>re2</i>	Legal form of the investment enterprise (K3) / party required to report (K4)	rechtsform
<i>re3</i>	Legal form of the 'third' enterprise (K3 only)	rechtsform
<i>lz1</i>	Up to 2003: Federal state of party required to report (K3) / DI enterprise (K4)	lzb
<i>lz2</i>	Up to 2003: Federal state of party required to report (K4)	lzb
<i>bl1</i>	2004 on: Federal state of party required to report (K3) / DI enterprise (K4)	lzb
<i>bl2</i>	2004 on: Federal state of party required to report (K4)	lzb
<i>bst</i>	Balance sheet date	–
<i>p04</i>	Annual turnover in € thousand	–
<i>pk04</i>	Annual turnover/divisor [K3], * <i>bg</i> [K4]	–
<i>p05</i>	Number of employees (partly estimated)	–
<i>pk05</i>	Number of employees/divisor [K3], * <i>bg</i> [K4]	–
<i>p08</i>	Subscribed capital unpaid	–

²² Not used for type 3.

²³ Own calculations taking account of the subsidiary company's debts to its capital-suppliers.

²⁴ This variable contains – numerically – the original value of the initial data which is covered by a label in table view (browse or edit). If, for example, *lan* = 1, then F (for France) is displayed. Please do not use labels in queries because unfortunately that leads to omitted results if labels are not uniquely assigned to the values.

²⁵ For K3 up to 2005 sector of the German group. 2006 on: sector of the German subgroup (K3 and K4).

<i>pk08</i>	<i>p08</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p09; p10</i>	<i>p08a; p08b</i>	—
<i>p11</i>	Fixed and intangible assets	—
<i>pk11</i>	<i>p11</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p12</i>	Financial assets	—
<i>pk12</i>	Financial assets/divisor [K3], * <i>bg</i> [K4]	—
<i>p13</i>	of which shares in affiliated enterprises/participating interests	—
<i>p14</i>	of which loans to shareholders/affiliated enterprises/enterprises linked with the party required to report through participating interests.	—
<i>p15; p16</i>	<i>p14a; p14b</i>	—
<i>p15d; p16d</i>	Reverse loan capital from <i>p15</i> and <i>p16</i>	—
<i>p17</i>	Current assets	—
<i>p18</i>	of which claims on affiliated shareholders/enterprises and on enterprises linked with the party required to report through participating interests.	—
<i>p19; p20</i>	<i>p18a, p18b</i>	—
<i>p19d; p20d</i>	Reverse loan capital from <i>p19</i> and <i>p20</i>	—
<i>p21</i>	Other assets	—
<i>p22</i>	Amount not backed by own funds	—
<i>pk22</i>	<i>p22</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p22a/b</i>	<i>p22a; p22b</i>	—
<i>p23</i>	Subscribed or called-up capital, endowment capital and contributions by partners (ie nominal capital)	—
<i>pk23</i>	<i>p23</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p24; p25</i>	<i>p23a; p23b</i>	—
<i>p26</i>	of which contributions from limited partners (of a KG)	—
<i>p27; p28</i>	<i>p26a ; p26b</i>	—
<i>p29</i>	Capital reserves	—
<i>pk29</i>	<i>p29</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p29a/b</i>	<i>p29a ; p29b</i>	—
<i>p30</i>	Revenue reserves	—
<i>pk30</i>	<i>p30</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p30a/b</i>	<i>p30a; p30b</i>	—
<i>p31</i>	Profit/loss carried forward	—
<i>pk31</i>	<i>p31</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p31a/b</i>	<i>p31a; p31b</i>	—
<i>p32</i>	Profit and loss for the financial year (after taxes, prior to profit distribution, and offsetting of losses carried forward)	—
<i>pk32</i>	<i>p32</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p32a/b</i>	<i>p32a; p32b</i>	—
<i>p33</i>	Liabilities	—
<i>p34</i>	of which liabilities to shareholders/affiliated enterprises/enterprises linked with the party required to report through participating interests	—
<i>p35</i>	of which to such enterprises outside of (K3)/in (K4) Germany	—
<i>p36</i>	<i>p35b</i>	—
<i>p36d</i> ²⁶	<i>p36d</i> , ie <i>p35b</i> , which are counted as direct investment	—
<i>p37</i>	and such enterprises in Germany (K3)/outside of Germany (K4)	—
<i>p37d</i> ²⁶	<i>p37</i> , which are counted as direct investment	—
<i>p38</i>	<i>p37a</i> (portion of <i>p37</i> accounted for by shareholders)	—
<i>p38d</i>	<i>p37a</i> , which are counted as direct investment	—
<i>p39</i>	Other liabilities (eg accruals for pensions)	—
<i>p40</i>	Balance sheet total. In the case of overindebted affiliates (that is if $p23 + p29 + p30 + p31 + p32 < 0$) <i>p40</i> is reduced by the amount of negative equity in order to passivate over-indebtedness.	—
<i>pk40</i>	<i>p40</i> / divisor [K3], * <i>bg</i> [K4]	—
<i>p43</i>	Number of investment enterprises included in report (K3)	—
	Number of foreign investors (K4)	—
<i>pk43</i>	<i>p43</i> / divisor (K3), * <i>bg</i> (K4)	—
<i>p44</i>	Direct secondary loan	—
<i>p45</i>	K3: divisor (number of participating German investors), K4: indirect secondary loan ²⁷	—
<i>p47</i>	Proportionate equity capital at market values	—

²⁶ Items *p37d* and *p38d* are calculated so that the value accounted for in *p38d* is factored out of item *p37d*. This ensures that the two items do not overlap. In other words, *p38d* includes only the direct debts to shareholders outside of Germany and *p37d* only those to other affiliated enterprises (in the respective foreign country).

²⁷ Virtually never occurs on K3, occurred 12 times 1989-1999 on K4.

<i>p48</i>	2004 on: Extraordinary income	–
<i>p48 a/b</i>	2004 on: <i>p48a</i> ; <i>p48b</i>	–
<i>bgu/m</i>	Degree of participation in direct/indirect FDI	–
<i>ppu/m</i>	1996 on: Degree of participation calculated from the original balance sheet (national currency)	–
<i>bg</i>	Until 2002, degree of participation = <i>bgu/m</i> , thereafter = <i>ppu/m</i>	–
<i>pdbw</i>	2001 on: If appropriate: proportionate equity capital at market values (<i>p47</i>) plus debts to the investment enterprise; else <i>pbu</i> (field is always filled)	–
<i>pm1</i>	2001 on: all direct K3 outside Germany (including holding companies)	–
<i>pm2</i>	2001 on: all direct K4 in Germany	–
<i>pm4</i>	2002 on: German investor's balance sheet total	–
<i>pm5</i>	2002 on: German investor's turnover in € thousand	–
<i>pm6</i>	2002 on: German investor's number of employees	–
<i>pm7</i>	2002 on: balance sheet total of the corporate group (German UO, if applicable)	–
<i>pm8</i>	2002 on: turnover of the corporate group (German UO, if applicable)	–
<i>pm9</i>	2002 on: number of employees of the corporate group (German UO, if applicable)	–
<i>pm10</i>	2002 on: flag for <i>pm7</i> , <i>pm8</i> , <i>pm9</i> : 0 if <i>pm7-9</i> figures from consolidated financial statement of resident UO (=first best); 1 if <i>pm7-9</i> figures from individual financial statement of UO; UO is non-holding 2 if <i>pm7-9</i> figures from individual financial statement of UO; UO is holding company	–
<i>or</i>	3 if reporting unit is private individual	–
<i>ubf</i>	2005 on: mode of entry for the reporting unit	–
<i>em1</i>	1 – greenfield creation; (K4 only) 2 – merger & acquisition or brownfield take-over; (K4 only) 3 – exemption limits exceeded first time; (K4 only) 0 – existing previously	–
<i>em2</i>	2005 on: mode of entry the DI enterprise 1 – new establishment / greenfield; (K3 and rep. unit of secondary K4) 2 – merger / acquisition / take-over; (K3 and rep. unit of secondary K4) 3 – exemption limits exceeded first time; (K3 and rep. unit of secondary K4) 0 – existing previously	–
<i>bif</i>	2005 on: balance sheet flag 0 – German national accounting 1 – International accounting (US-GAAP, IFRS, ...) 9 – (so far) no information available	–
<i>bri</i>	2002 on: sector of national UO	branche
<i>fs1</i>	2002 on: external identifier of reporting unit (available upon request)	–
<i>fs2</i>	2002 on: external identifier of DI enterprise (available upon request)	–
<i>fsa</i>	2002 on: external identifier of foreign UO (available upon request)	–
<i>fsi</i>	2002 on: external identifier of resident UO (available upon request)	–
<i>fsz</i>	2002 on: external identifier of intermediate foreign firm (available upon request)	–
<i>laa</i>	2002 on: country of foreign UO	–
<i>laz</i>	2002 on: country of intermediate foreign firm	–
<i>noa</i>	2002 on: identifier of foreign UO	–
<i>nui</i>	2002 on: identifier of resident UO	–
<i>ubo</i>	2002 on: UO flag: see table on page 27	–
<i>noz</i>	2002 on: identifier of foreign intermediate firm	–
<i>lam</i>	2002 on: new country of DI enterprise (reserve position)	–
<i>lno</i>	2002 on: new country of investor (reserve position)	–
<i>wae</i>	Currency of denomination of original report	–

Countries

Code	Country	Country label*
Europe and CIS		
000	DM	--
888	EUR	--
1	France (including Monaco)	F
2/102/17	Belgium	B
3	Netherlands	NL
4/104/18	Luxembourg	LUX
5	Italy	I
6	United Kingdom	GB
7	Ireland	IRL
8	Denmark	DK
9	Greece	GR
10	Portugal	P
11	Spain	E
21/202	Canary Islands	E
22	Ceuta and Melilla	E
24	Iceland	IS
25/41	Faroe Islands	DK (FR)
27	Svalbard	N (SVA)
28	Norway	N
30	Sweden	S
32	Finland	FIN
36	Switzerland (including Buesingen and FL)	CH
37	Liechtenstein	FL
38	Austria	A
39	Switzerland	CH
43	Andorra	AND
44	Gibraltar	GB (GBZ)
45	Vatican City	SCV
46	Malta	M
47	San Marino	RSM
48	Yugoslavia (until 1990)	YU alt
52	Turkey	TR
53	Estonia	EST
54	Latvia	LV
55	Lithuania	LT
56	Former Soviet Union (until 1991)	SU
60	Poland	PL
61	Czech Republic	CZ
62	Former Czechoslovakia	CZ alt
63	Slovak Republic	SK
64	Hungary	H
66	Romania	RO
68	Bulgaria	BG
70	Albania	AL
72	Ukraine	UA
73	Belarus	BY
74	Moldova	MD
75	Russian Federation	RUS
76	Georgia	GE
77	Armenia	AR
78	Azerbaijan	AZ
79	Kazakhstan	KZ
80	Turkmenistan	TM
81	Uzbekistan	UZ
82	Tajikistan	TJ
83	Kyrgyzstan	KS
90	Yugoslavia	YU alt
91	Slovenia	SLO
92	Croatia	HR
93	Bosnia-Herzegovina	BIH
94	Yugoslavia	YU

96	Macedonia	MK
97	Montenegro	ME
99	Serbia	RS
107	Guernsey	GB (GBG)
108	Jersey	GB (GBJ)
109	Isle of Man	GB (GBM)

Africa

204	Marocco	MA
208	Algeria	DZ
212	Tunisia	TN
216	Libyan Arab Jamahiriya	LAR
220	Egypt	ET
224	Sudan	SUD
228	Mauritania	RIM
232	Mali	RMM
236	Burkina Faso	BF
240	Niger	RN
244	Chad	TCH
247	Cape Verde	CV
248	Senegal	SN
252	Gambia	WAG
257	Guinea-Bissau	GNB
260	Guinea	RG
264	Sierra Leone	WAL
268	Liberia	LB
272	Côte d'Ivoire	CI
276	Ghana	GH
280	Togo	RT
284	Benin	DY
288	Nigeria	WAN
302	Cameroon	CAM
306	Central African Republic	RCA
310	Equatorial Guinea	GQ
311	Sao Tome and Principe	STP
314	Gabon	G
318	Congo	RCB
322	Democratic Republic of Congo (formerly Zaire)	ZRE
324	Rwanda	RWA
328	Burundi	BU
329	St Helena	GB (STH)
330	Angola	ANG
334	Ethiopia	ETH
336	Eritrea	ER
338	Djibouti	DJI
342	Somalia	SP
346	Kenya	EAK
350	Uganda	EAU
352	Tanzania	EAT
355	Seychelles	SY
357	Chagos Archipelago (British Indian Ocean Territory)	GB (TGS)
366	Mozambique	MOC
370	Madagascar	RM
372	Réunion	F (REU)
373	Mauritius	MS
375	Comoros	COM
377	Mayotte	F (MAY)
378	Zambia	Z
382	Zimbabwe	ZW
386	Malawi	MW
388	South Africa	ZA
389	Namibia	NAM
390	The Republic of South Africa and Namibia (until 1990)	ZAN
391	Botswana	RB
393	Swaziland	SD
395	Lesotho	LS

America

400	United States of America (and Puerto Rico)	USA
404	Canada	CDN
406	Greenland	DK (GRO)
408	St Pierre and Miquelon	F (SPM)
412	Mexico	MEX
413	Bermuda	GB (ABJ)
416	Guatemala	GCA
421	Belize	BH
424	Honduras	HN
428	El Salvador	ES
432	Nicaragua	NIC
436	Costa Rica	CR
442	Panama	PA
446	Anguilla	GB (ABJ)
448	Cuba	C
449	St Kitts and Nevis	KAN
452	Haiti	RH
453	Bahamas	BS
454	Turks and Caicos Islands	GB (TAC)
456	Dominican Republic	DOM
457	US Virgin Islands	USA (VIRA)
458	Guadeloupe	F (GUA)
459	Antigua and Barbuda	AG
460	Dominica	WD
461	British Virgin Islands and Montserrat	GB (VIRM)
462	Martinique	F (MAR)
463	Cayman Islands	GB (CAY)
464	Jamaica	JA
465	St Lucia	WL
467	St Vincent	WV
468	British Virgin Islands	GB (VIRB)
469	Barbados	BDS
470	Montserrat	GB (GBMS)
472	Trinidad and Tobago	TT
473	Grenada	WG
474	Aruba	NL (ARU)
478	Netherlands Antilles	NL (NA)
480	Columbia	CO
484	Venezuela	YV
488	Guyana	GUY
492	Surinam	SME
496	French Guyana	F (FGUY)
500	Ecuador	EC
504	Peru	PE
508	Brazil	BR
512	Chile	RCH
516	Bolivia	BOL
520	Paraguay	PY
524	Uruguay	ROU
528	Argentina	RA
529	Falkland Islands	GB (GBF)

Asia

600	Cyprus	CY
604	Lebanon	RL
608	Syria	SYR
612	Iraq	IRQ
616	Iran, Islamic Republic of	IR
624	Israel	IL
625	West Bank/Gaza Strip	WB
628	Jordan	JOR
632	Saudi Arabia	KSA
636	Kuwait	KWT
640	Bahrain	BRN
644	Qatar	Q

647	United Arab Emirates	UAE
649	Oman	OM
652	North Yemen	Y
653	Yemen	Y
656	South Yemen	Y
660	Afghanistan	AFG
662	Pakistan	PK
664	India	IND
666	Bangladesh	BD
667	Maldives	MV
669	Sri Lanka	CL
672	Nepal	NEP
675	Bhutan	BHT
676	Myanmar (formerly Burma)	MYA
680	Thailand	THA
684	Laos	LAO
690	Vietnam	VN
696	Cambodia	K
700	Indonesia	RI
701	Malaysia	MAL
703	Brunei	BRU
706	Singapore	SGP
708	Philippines	RP
716	Mongolia	MAU
720	China	VRC
724	Korea, Democratic Republic of (formerly North Korea)	KOR
728	Korea, Republic of (formerly South Korea)	ROK
732	Japan	J
736	Taiwan	RC
740	Hong Kong	HK
743	Macau	MAC

Australia and Oceania

800	Australia	AUS
801	Papua New Guinea	PNG
802	Australian Oceania	AUS (AUO)
803	Nauru	NAU
804	New Zealand	NZ
806	Solomon Islands	SOL
807	Tuvalu	TUV
808	American Oceania	USA (AMO)
809	New Caledonia and territories	F (NEU)
810	American Oceania	USA (AMO)
811	Wallis and Futuna	F (WAF)
812	Kiribati	KIB
813	Pitcairn	GB (GBP)
814	New Zealand Oceania	NZ (NZO)
815	Fiji	FJI
816	Vanuatu	VAN
817	Tonga	TON
819	Samoa	WS
820	Northern Mariana Islands	USA (OZN)
822	French Polynesia	F (FPO)
823	Micronesia, Federated States of	FSM
824	Marshall Islands	MAI
825	Palau	PAL
834	Australian Oceania	AUS (AUO (CX))
837	New Zealand Oceania	NZ (NZO (CK))

Other

858	Countries not identified	n/a
890	Polar regions	POL
999	No data	n/a

Economic sectors

Individual sectors

Code	Sector
100	Agriculture, hunting and related service activities*
200	Forestry, logging and related service activities
39	Agriculture, hunting, forestry and fishing
500	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing*
59	Electricity, gas, steam and (hot) water supply
67	Mining of coal (including agglomeration and the manufacture of coke oven products)
75	Mining of potassium and rock salt, salines
84	Extraction of crude petroleum, natural gas
92	Mining of metal ores, other mining, extraction of peat
1000	Mining of coal and lignite, extraction of peat*
1100	Extraction of crude petroleum and natural gas, service activities incidental to oil and gas extraction*
112	Manufacture of chemicals and chemical products
117	Manufacture of refined petroleum products
1200	Mining of uranium and thorium ores*
122	Manufacture of plastic products
1300	Mining*
130	Manufacture of rubber products, retreading and rebuilding of rubber tyres
1400	Mining and quarrying, other mining*
1500	Manufacture of food products and beverages*
156	Mining and manufacturing of rock, stone, and related mineral products
1600	Manufacture of tobacco products*
164	Quarrying of stone, clay and abrasives
168	Manufacture and processing of fine ceramics and glass
1700	Manufacture of textiles*
173	Manufacture of iron and steel*
1800	Manufacture of textile products*
181	Ferrous metal foundries
1900	Manufacture of leather and leather products*
2000	Manufacture of wood and wood products*
204	Drawing plants, cold rolling mills, secondary transformation of metals, other workshops
207	Manufacture of non-ferrous metals, non-ferrous metal foundries
2100	Manufacture of pulp, paper and paper products*
213	Manufacture of structural metal products
2200	Publishing, printing and reproduction of recorded media*
223	Manufacture of machinery and equipment n.e.c.
227	Manufacture of office machinery and computers
228	Manufacture of railway and tramway locomotives and rolling stock
2300	Manufacture of coke, refined petroleum products and nuclear fuel*
230	Manufacture of motor vehicles including maintenance
235	Building and repairing of ships
237	Manufacture of aircraft and spacecraft
2400	Manufacture of chemicals and chemical products*
2440	Manufacture of pharmaceutical products*
244	Manufacture of electrical equipment
2500	Manufacture of rubber and plastic products*
253	Electrical and optical equipment, manufacture of watches and clocks
257	Manufacture of other fabricated metal products n.e.c.
2600	Manufacture of other non-metallic mineral products*
264	Manufacture of fountain pens and the like, stamps etc
267	Manufacturing n.e.c.
2700	Manufacture of basic metals*
272	Manufacture of wood
275	Wood processing
2800	Manufacture of metal products*
280	Manufacture of pulp, paper and paperboard
282	Processing of paper and pulp
285	Printing and reproduction
2900	Manufacture of machinery and equipment n.e.c.*

(2005 on)

* NACE Rev. 1 categories used since 1995 (3/4-digit). **Note:** Codes before 1995 are 2/3-digit.

** From 2005 on more detailed classification.

3000	Manufacture of office machinery and computers *	
303	Manufacture of leather and leather products, footwear	
308	Manufacture of textiles	
3100	Manufacture of electrical machinery and apparatus n.e.c. *	
314	Manufacture of wearing apparel	
318	Manufacture of textile products, upholstery and decoration	
3200	Manufacture of radio, television and communication equipment and apparatus *	
3300	Manufacture of medical, precision and optical instruments, watches and clocks *	
3400	Manufacture of motor vehicles, trailers and semi-trailers *	
343	Manufacture of food products	
345	Manufacture of tobacco	
3500	Manufacture of other transport equipment *	(up to 2004)
3510	Building and repairing of ships and boats	(2005 on)
3520	Manufacture of railed vehicles **	(2005 on)
3530	Manufacture of aircraft and spacecraft **	(2005 on)
3540	Manufacture of motorcycles, bicycles, invalid carriages **	(2005 on)
3550	Manufacture of other transport equipment n.e.c.	(2005 on)
3600	Manufacture of furniture, manufacturing n.e.c.	
3700	Recycling	
399	Construction	
4000	Electricity, gas, steam and hot water supply *	
404	Wholesale of refined petroleum products	
4100	Collection, purification and distribution of water *	
449	Wholesale trade and commission trade	
4500	Construction sector	
496	Retail trade	
5000	Sale, repair of motor vehicles; retail sale of automotive fuel *	
5100	Wholesale trade and commission trade (except of motor vehicles and motorcycles) *	
5200	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods *	
5500	Hotels and restaurants	
599	Transport, storage and communication	
6000	Land transport; transport via pipelines *	
6100	Water transport	
617	Financial intermediation, including insurance	
6200	Air transport	
6300	Supporting and auxiliary transport activities; activities of travel agencies *	
6400	Post and telecommunications	(up to 2004)
6410	Post and courier activities **	(2005 on)
6420	Telecommunications	(2005 on)
6550	Deutsche Bundesbank *	
6560	Other credit institutions *	
6570	Financial leasing	
6580	Other financial intermediaries *	
6590	Investment funds	
6600	Insurance and pension funding, except compulsory social security *	
6700	Activities auxiliary to financial intermediation	
695	Insurance enterprises	
7050	Housing enterprises *	
7060	Other real estate activities *	
7100	Renting of machinery and equipment without operator and of personal and household goods *	
719	Housing enterprises and other real estate activities	
7200	Computer and related activities *	
7300	Research and development *	
731	Management activities of holding companies	
737	Asset management	
7400	Other business activities *	(up to 2004)
7411	Legal activities	(2005 on)
7412	Accounting, book-keeping and auditing activities; tax consultancy **	(2005 on)
7413	Market research and public opinion polling	(2005 on)
7414	Business and management consultancy activities **	(2005 on)
7420	Architectural and engineering activities and related technical consultancy **	(2005 on)
7430	Technical testing and analysis	(2005 on)
7440	Advertising	(2005 on)
7450	Labour recruitment and provision of personnel **	(2005 on)
7460	Investigation and security activities	(2005 on)
7470	Industrial cleaning	(2005 on)
7480	Miscellaneous business activities n.e.c. **	(2005 on)
7490	Management activities of holding companies *	
755	Hotels and restaurants and social work activities with accommodation	

7560	Federal government*
7570	Federal states*
7580	Local government and local authority associations*
7590	Social security and employment promotion
777	Human and veterinary health activities
779	Renting of machinery and equipment
786	Other business activities
795	Other business activities n.e.c.
8000	Education*
800	Non-profit organisations serving households
8500	Health and social work, excluding non-profit organisations serving households*
850	Private households with employed persons
9000	Sewage and refuse disposal, sanitation and similar activities*
900	General government
901	Federal government – general government
902	Federal states – general government
903	Local authorities – general government
9100	Activities of other membership organisations, excl. non-profit organisations serving households*
910	Compulsory social security activities
9200	Recreational, cultural and sporting activities, excl. non-profit org. serving households* (up to 2004)
9210	Motion picture and video activities** (2005 on)
9220	Radio and television activities** (2005 on)
9230	Other entertainment activities** (2005 on)
9240	News agency activities** (2005 on)
9250	Library, archives, museums and other cultural activities** (2005 on)
9260	Sporting activities** (2005 on)
9270	Other recreational activities** (2005 on)
9300	Other service activities n.e.c., excluding non-profit organisations serving households*
9550	Private households with employed persons
9560	Other households
9600	Non-profit organisations serving households, excl. business, employers' and professional orgs*
974	Investment enterprises
9800	Other*
993	Credit institutions
995	Credit institutions including investment enterprises
9999	Not elsewhere classified*

Sectoral grouping²⁸

WZ 2003	bgr	Description	Allocated to these sector codes
A/B	LFF	Agriculture, hunting and forestry	39, 100, 200, 500
C	BSE	Mining and quarrying	67, 75, 84, 92, 156, 164 1000, 1100, 1200, 1300, 1400
DA	EUT	Manufacture of food products, beverages and tobacco	343, 345 1500, 1600
DB/DC	TBL	Textiles, apparel and leather goods	303, 308, 314, 318 1700, 1800, 1900
DD	HLZ	Manufacture of wood and wood products (excl. furniture)	272, 275 2000
DE	PVD	Manufacture of pulp, paper and paper products; publishing and printing	280, 282, 285 2100, 2200
DF	KMB	Manufacture of coke, refined petroleum products and nuclear fuel	117 2300
DG	CHE	Manufacture of chemicals and chemical products	112 2400, 2440
DH	GUK	Manufacture of rubber and plastic products	122, 130 2500
DI	GKV	Manufacture of other non-metallic mineral products	168 2600
DJ	MET	Metal-working industry	173, 181, 204, 207, 213, 257 2700, 2800

²⁸ The sectoral groups indicated here are only examples and are included in the database as "value labels" for the original sectors' numerical codes.

DK	MAS	Manufacture of machinery and equipment n.e.c.	223 2900
DL	ICT	Manufacture of office machineries, computers, electrical and optical equipment	227, 244, 253 3000, 3100, 3200, 3300
DM	FZB	Manufacture of transport equipment	228, 230, 235, 237 3400, 3500, 3510, 3520, 3530, 3540, 3550
DN	MSR	Manufacturing n.e.c.	264, 267 3600, 3700
E	EUW	Electricity, gas and water supply	59 4000, 4100
F	BAU	Construction	399, 4500
G	EIN	Retail trade	496 5000, 5200
G	GRO	Wholesale trade	404, 449 5100
H	GGW	Hotels and restaurants	755 5500
I	TUV	Transportation, post, telecommunication	599 6000, 6100, 6200, 6300, 6400, 6410, 6420
J	FDL	Financial services	617, 695, 737, 974, 993, 995 6550, 6560, 6570, 6580, 6590, 6600, 6700
K	DLU	Business activities	786 7400, 7411, 7412, 7413, 7414, 7420, 7430, 7440, 7450, 7460, 7470, 7480
K	EDV	Computer and related activities	7200
K	FUE	Research and development	7300
K	GWV	Real estate and renting activities	719, 779 7050, 7060, 7100
K	HLD	Holding companies	731 7490
L	OHH	General government	900, 901, 902, 903 7560, 7570, 7580
L	SOZ	Compulsory social security activities	910 7590
M/N	EUG	Education, health, veterinary and social care	777 8000, 8500
O	AAE	Sewage and refuse disposal	9000
O	INT	Activities of other membership organisations	9100
O	KSU	Recreational, cultural and sporting activities	9200, 9210, 9220, 9230, 9240, 9250, 9260, 9270
O	SDL	Other service activities	795 9300
P	OOE	Non-profit organisations serving households	800 9600
P	PRI	Private households with employed persons	850 9550, 9560
–	SON	Other	9800, 9999

Balance sheet types

Code Balance sheet type

0	Not included in the standard version of the microdatabase. Includes the original balance sheet for enterprises artificially divided into holding companies and non-holding companies or balance sheets for indirect elements in holding chains which are disregarded. (Especially for FDI aggregates, otherwise there would be duplication).
1	Direct participating interests in non-holding companies or in holding companies which do not hold any indirect participating interests subject to reporting requirements in the same country.
2	Direct participating interests in holding companies which report indirect participating interests.
3	Indirect participating interests held by holding companies.
4	Indirect participating interests held by non-holding companies.
5	Direct and indirect participating interests held by holding companies.
6	Direct and indirect participating interests held by non-holding companies.

Federal states

Code	Federal state	abbr.	Code	Federal state	abbr.
0, 10	No allocation	n/a	24	Hamburg	HH
1	Berlin	B	31	Rhineland Palatinate	RP
11	Free State of Bavaria	BY	32	Saarland	SL
12	Hesse	HE	41	Mecklenburg-Western Pomerania	MV
13	Baden-Württemberg	BW	42	Brandenburg	BR
14	Bremen	HB	43	Saxony-Anhalt	SA
21	Lower Saxony	NI	44	Free State of Saxony	SN
22	North Rhine-Westphalia	NRW	45	Thuringia	TH
23	Schleswig-Holstein	SH			

Legal forms

Code	Legal form
Resident enterprises	
0	Households
1	AG and KGaA
2	GmbH and & Co GmbH
3	Sole proprietorships, KG (Kommanditgesellschaft), OHG (offene Handelsgesellschaft), OHG mbH (offene Handelsgesellschaft mit beschränkter Haftung), GmbH & Co KG, AG & Co KG, GbR (Gesellschaft des bürgerlichen Rechts), GbR mbH (Gesellschaft des bürgerlichen Rechts mit beschränkter Haftung), e.V., e.G., a.G.
4	Branch or permanent establishment
5	German enterprise with foreign legal form (z.B. B.V., Ltd.)
Foreign enterprises	
0	Legally independent enterprises
1	Branch or permanent establishment

UBO-Flags

00	Reporting unit is independent
30	Reporting unit or UBO of the reporting unit owned by domestic private individual
31	Reporting unit has domestic company as UBO
32	Reporting unit or UBO held by domestic public authorities
33	Reporting unit or UBO held by domestic family
40	Reporting unit or UBO held by foreign private individual
41	Reporting unit has foreign company as UBO
42	Reporting unit or UBO held by foreign public authorities
43	Reporting unit or UBO held by foreign family
60	Reporting unit or UBO held by a private individual via a domestic foundation or club
61	Reporting unit or UBO held by a domestic foundation or club
62	Reporting unit or UBO held by public authorities via a domestic foundation or club
63	Reporting unit or UBO held by a family via a domestic foundation or club
.	Reporting unit is private individual (<i>ubf</i> =3), no UBO determinable
99	UBO of reporting unit not yet identified

Web-Site of the FDI network

http://www.bundesbank.de/vfz/vfz_fdidaten.en.php

Bundesbank Discussion Papers using the MiDi

http://www.bundesbank.de/vfz/vfz_fdidaten_publicationen.en.php