

# Public/private funding of higher education revisited

A new in-depth analysis  
for Germany

Hanover, 12 June 2025  
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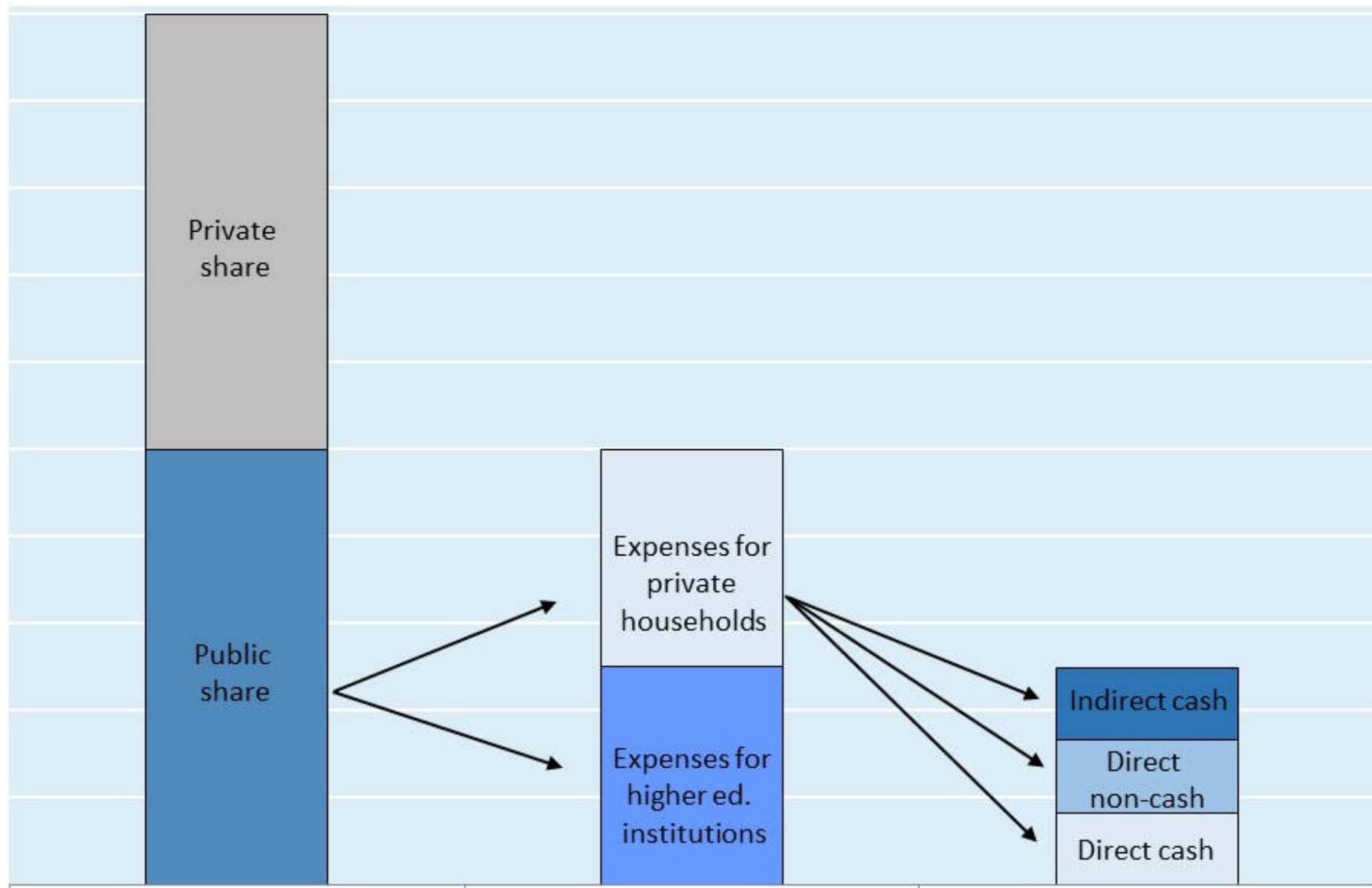
## Project background

- Update of (partial) results of the EU project „Public/private funding of higher education: a social balance“ from 2007/2008.
- Quantifying higher education funding (without research) and cost-sharing between the public and private sector in Germany as comprehensive as possible.

## Design

- Theoretical frame: Analytical concept to capture cost-sharing in higher education by D.B. Johnstone (1986).
- Data: Mainly secondary data (e.g. from the Federal Statistical Office, various federal ministries, the Federal Employment Agency, student support organisations, etc.), partially special analyses from these data providers.
- Method: descriptive-statistical system analysis based on aggregate cross-sectional data.

## Analysis scheme for higher education funding



## Public support for higher education in Germany 2023

| Category   | Amount in<br>1.000 Euro | Share of total<br>in % |
|--|-------------------------|------------------------|
| <b>Teaching allocations</b>  |                         |                        |
| <b>Total of teaching allocations</b>   | <b>23,024,433</b>       | <b>64.0</b>            |
| <b>Direct support (cash)</b>   |                         |                        |
| <i>BAföG grants</i>  | 1,453,879               | 4.0                    |
| Scholarships from various student support foundations ( <i>Studierendenförderungswerke</i> )                             | 233,338                 | 0.6                    |
| Germany scholarship ( <i>Deutschlandstipendium</i> )   | 33,244                  | 0.1                    |
| Orphans' pensions from statutory pension insurance, statutory accident insurance and civil service social security funds | 166,113                 | 0.5                    |
| General housing benefits   | 74,256                  | 0.2                    |
| Unemployment benefits ( <i>Arbeitslosengeld I</i> )  | 2,813                   | 0.01                   |
| Subsidies on interest for <i>BAföG</i> loans (public loan)   | 99,118                  | 0.3                    |
| Intended cancellation of <i>BAföG</i> debt (public loan)   | 431,118                 | 1.2                    |
| Unintended default of <i>BAföG</i> loans (public loan)   | 66,891                  | 0.2                    |
| <b>Total of direct support (cash)</b>  | <b>2,560,770</b>        | <b>7.1</b>             |

| Category   | Amount in<br>1,000 Euro | Share of total<br>in % |
|--|-------------------------|------------------------|
| <b>Direct support (non-cash)</b>   |                         |                        |
| Benefits from non-contributory statutory health insurance                | 2,069,717               | 5.8                    |
| Benefits from reduced contribution to statutory health insurance         | 736,491                 | 2.0                    |
| Benefits from non-contributory statutory long-term care insurance        | 472,416                 | 1.3                    |
| Benefits from reduced contribution to statutory long-term care insurance | 97,820                  | 0.3                    |
| Subsidies for facilities   | 787,149                 | 2.2                    |
| Subsidies for transportation   | 203,452                 | 0.6                    |
| <b>Total of direct support (non-cash)</b>                                | <b>4,367,045</b>        | <b>12.1</b>            |
| <b>Indirect support (cash)</b>   |                         |                        |
| Child benefits (parents working outside the civil service)               | 3,595,047               | 10.0                   |
| Child benefits (parents working for the civil service)                   | 725,302                 | 2.0                    |
| Family allowances (parents working for the civil service)                | 215,169                 | 0.6                    |

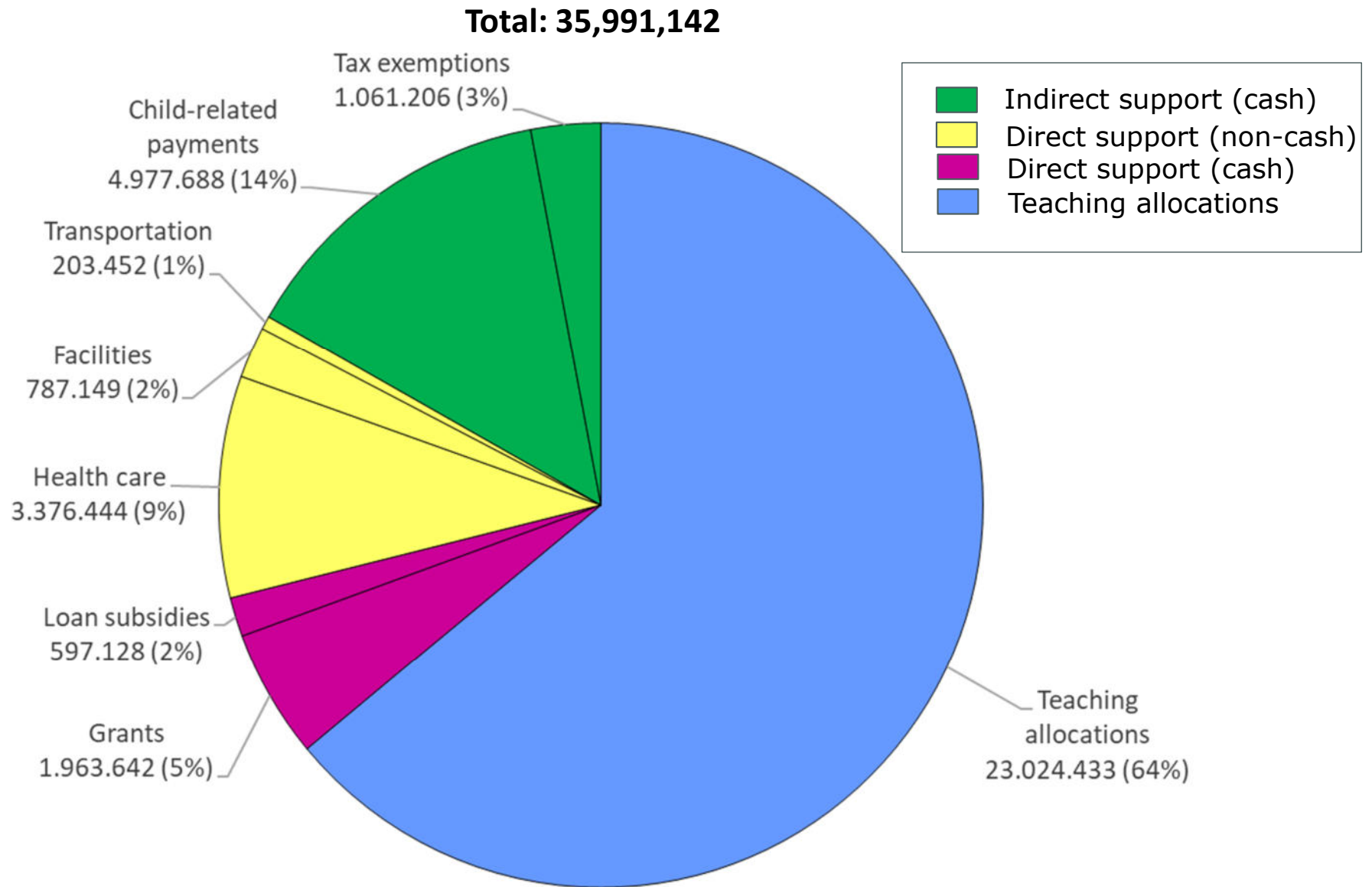
| Category   | Amount in 1,000 Euro | Share of total in % |
|--|----------------------|---------------------|
| Financial aid for children of civil servants and judges  | 319,416              | 0.9                 |
| Child-related add-on to unemployment benefits ( <i>Arbeitslosengeld</i> )  | 19,421               | 0.1                 |
| Child-related add-on to short-time working benefits  | 2,044                | 0.001               |
| Child-related add-on to allowance for retirement provisions  | 101,288              | 0.3                 |
| Tax exemption for dependent children according to § 32 EStG ( <i>Kinderfreibeträge</i> )                               | 171,226              | 0.5                 |
| Tax reduction for single parents according § 24b EStG  | 89,414               | 0.2                 |
| Tax exemption for children in education according to § 33a Abs. 1 EStG ( <i>Unterhaltsfreibetrag</i> )                 | 572,957              | 1.6                 |
| Tax exemption for non-resident children in education according to § 33a Abs. 2 EStG ( <i>Sonderbedarfsfreibetrag</i> ) | 89,000               | 0.2                 |

| Category   | Amount in<br>1,000 € | Share of total<br>in % |
|--|----------------------|------------------------|
| Tax exemption for add-on taxes (church tax and solidarity surcharge) | 138,609              | 0.4                    |
| <b>Total of Indirect support (cash)</b>                              | <b>6,038,893</b>     | <b>16.8</b>            |
| <b>Indirect support (non-cash)</b>                                   | <b>-</b>             | <b>-</b>               |
| <b>Total</b>   | <b>35,991,142</b>    | <b>100.0%</b>          |

Source: Own calculation.

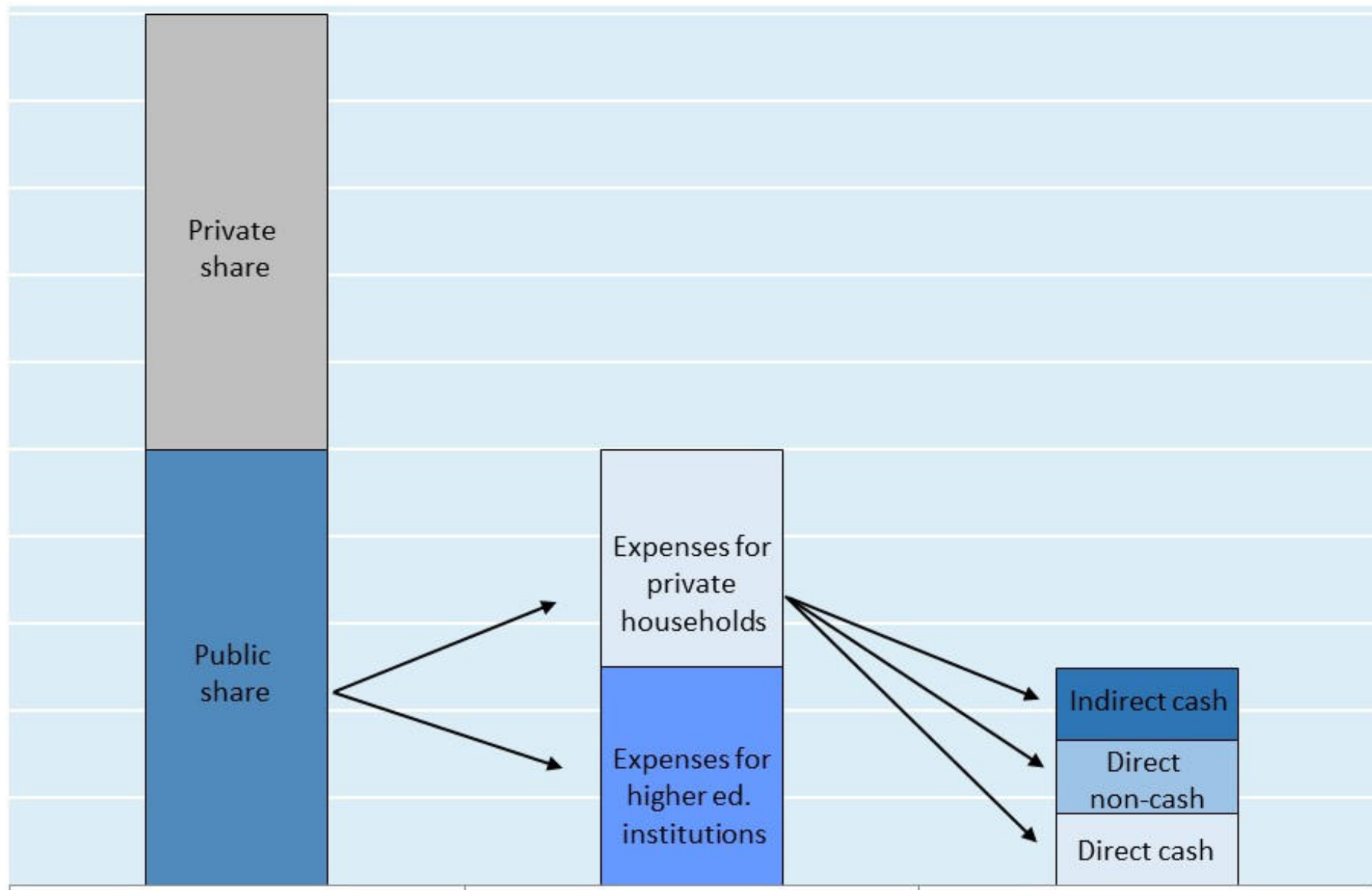


# Public support for higher education in Germany 2023 (in 1,000 Euro and per cent)



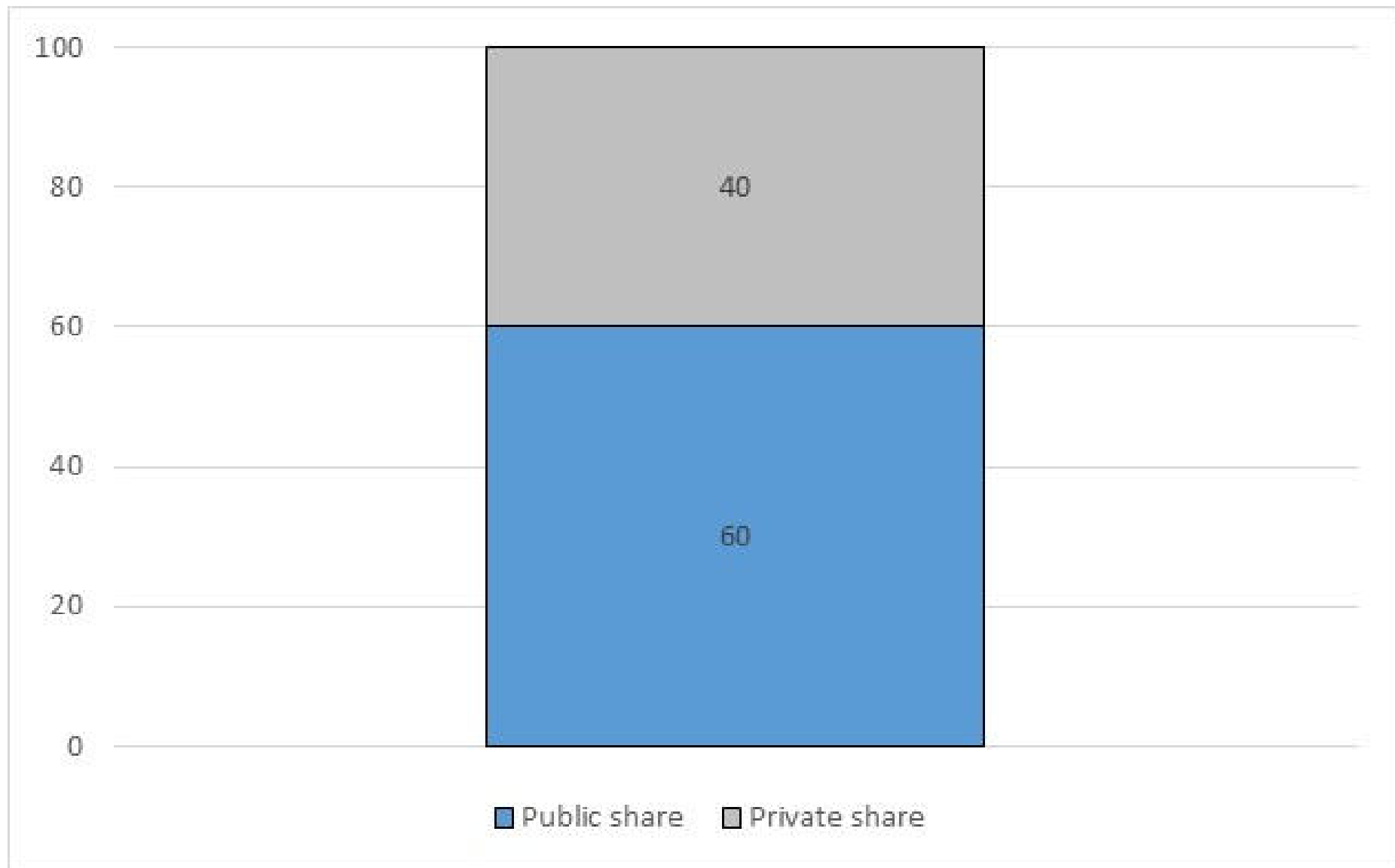
Source: Own calculation.

## Analysis scheme for higher education funding

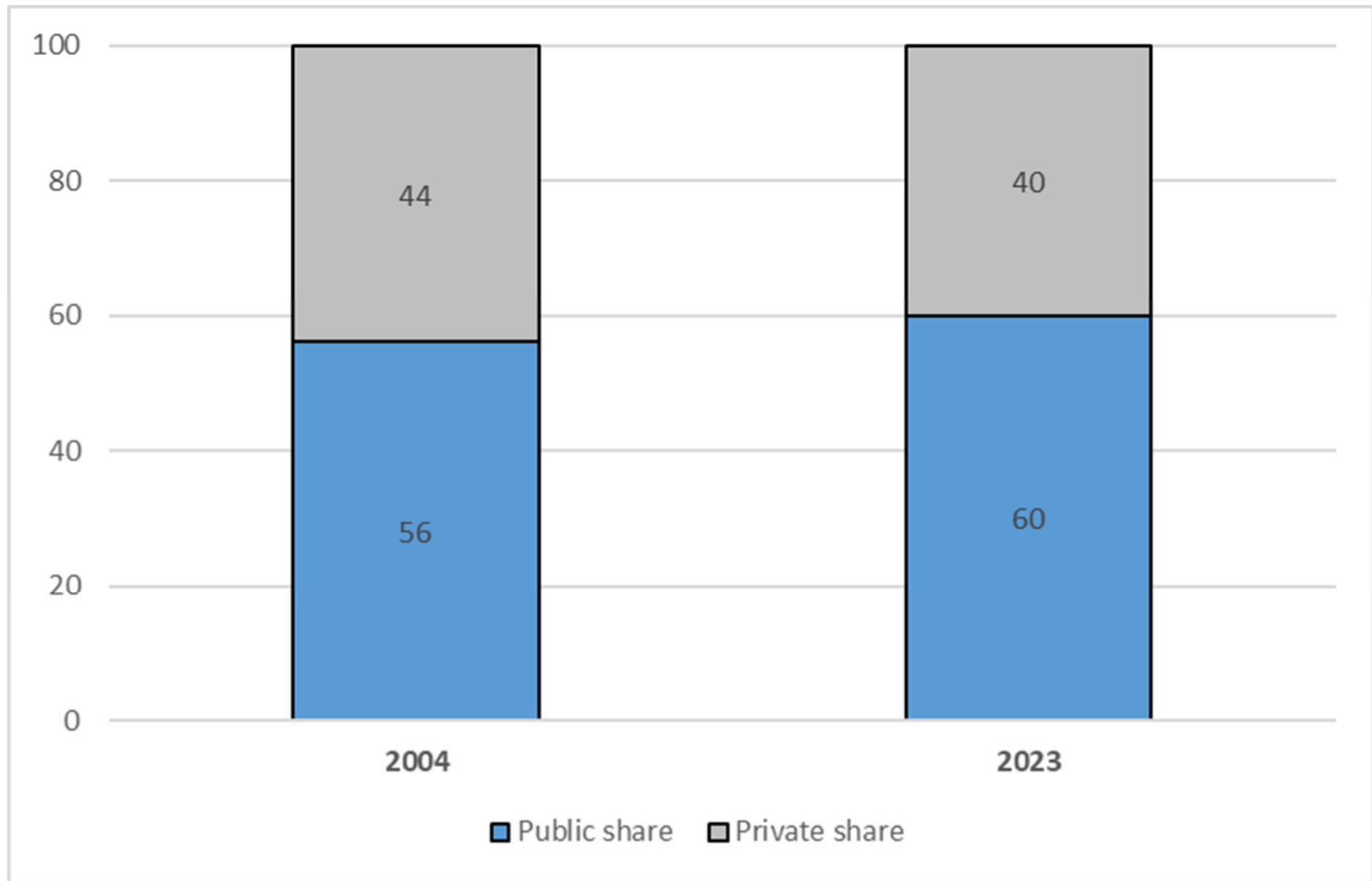


## Structure of total expenditure on higher education 2023, shares in %

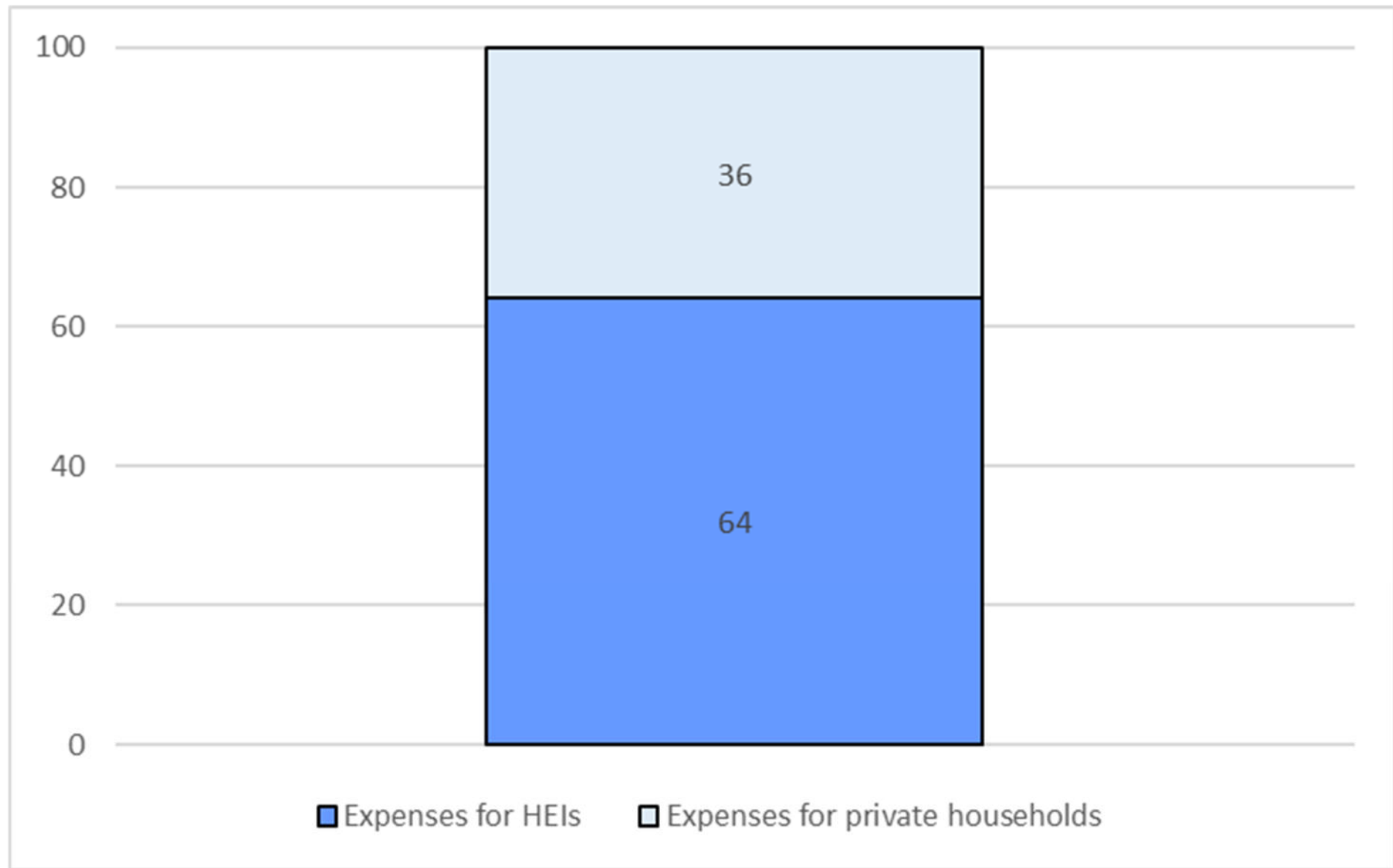
Total expenditure on higher education 2023: 59.8 billion Euro



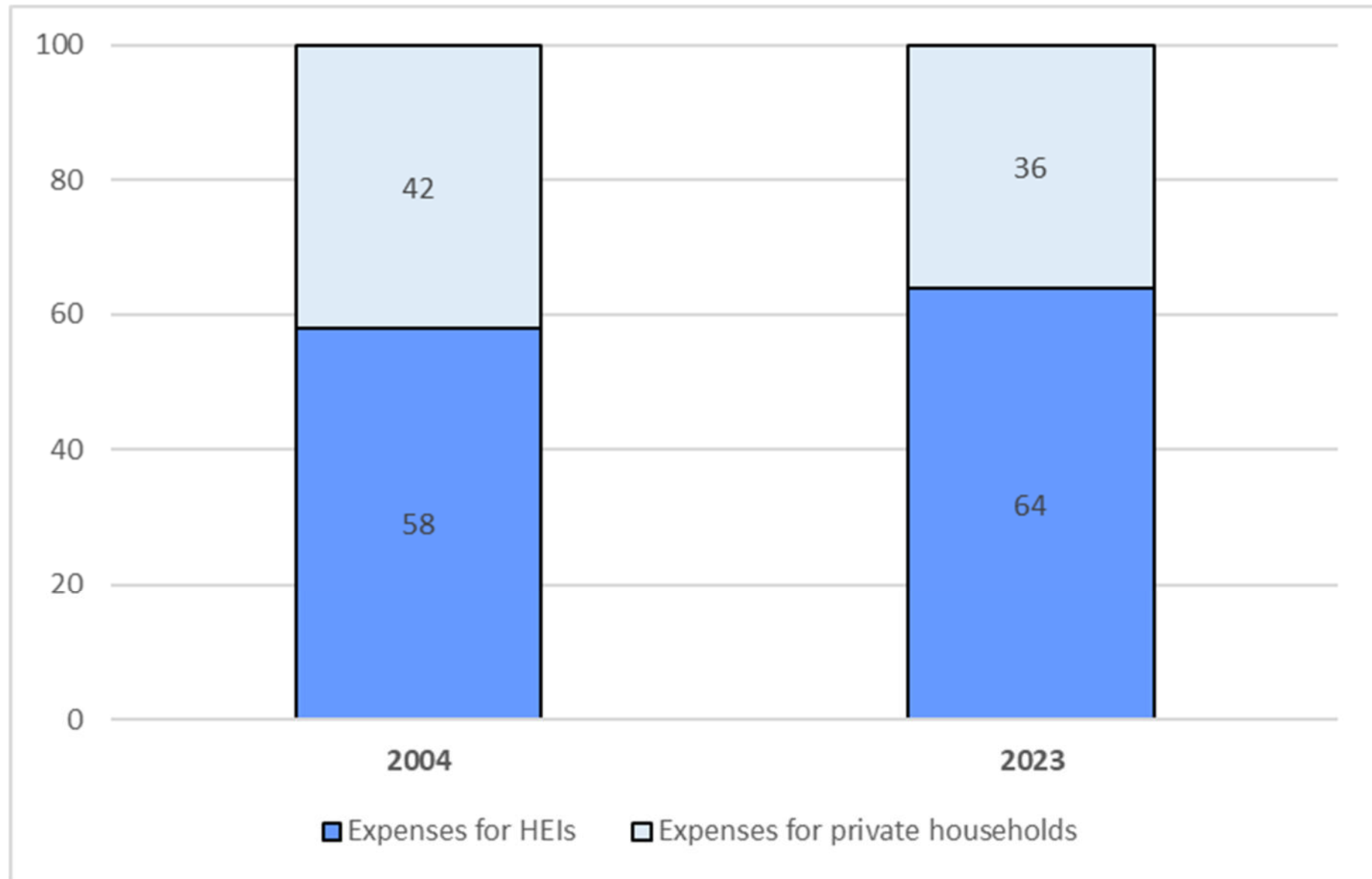
## Time comparison: Structure of total expenditure on higher education, shares in %



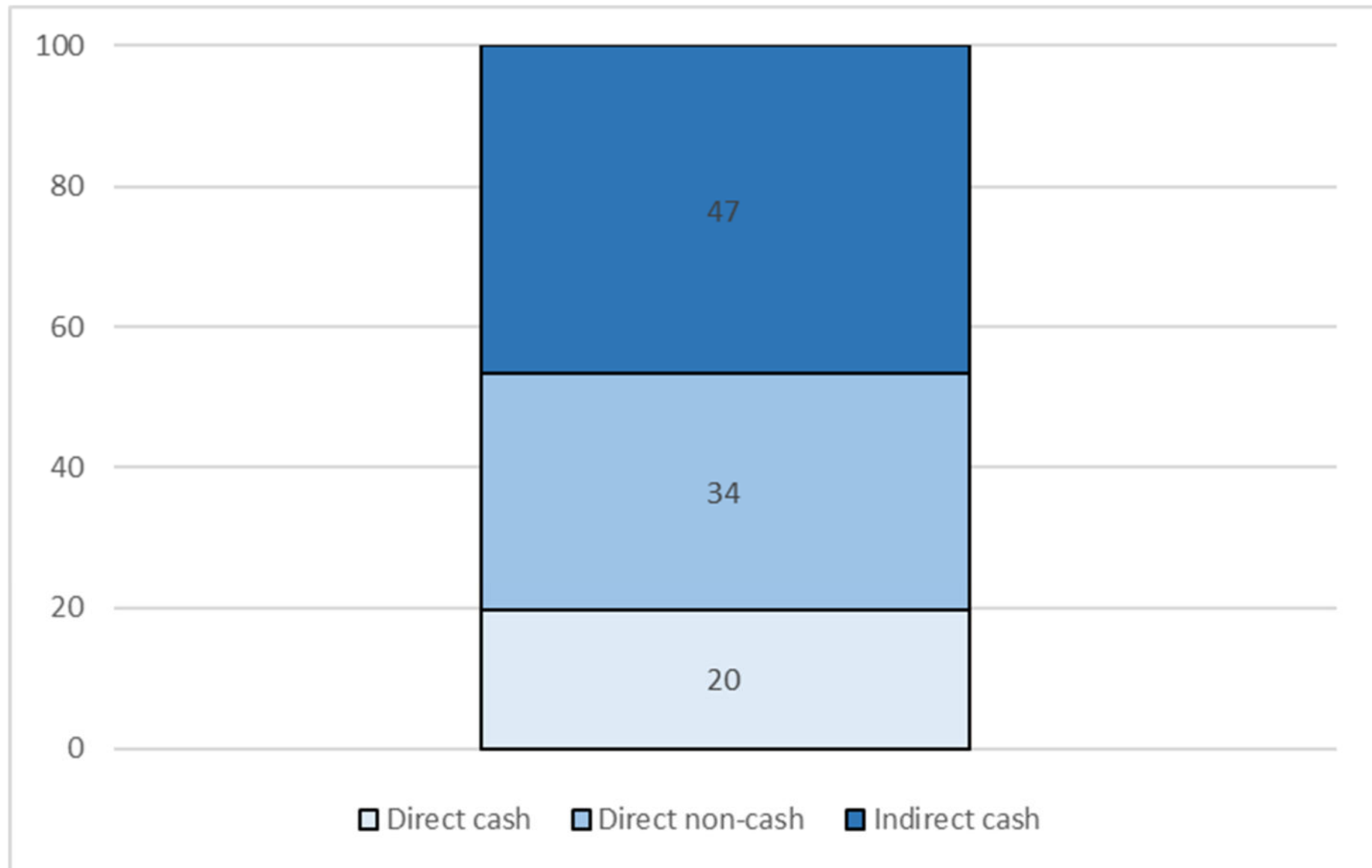
## Structure of public support for higher education 2023, shares in %



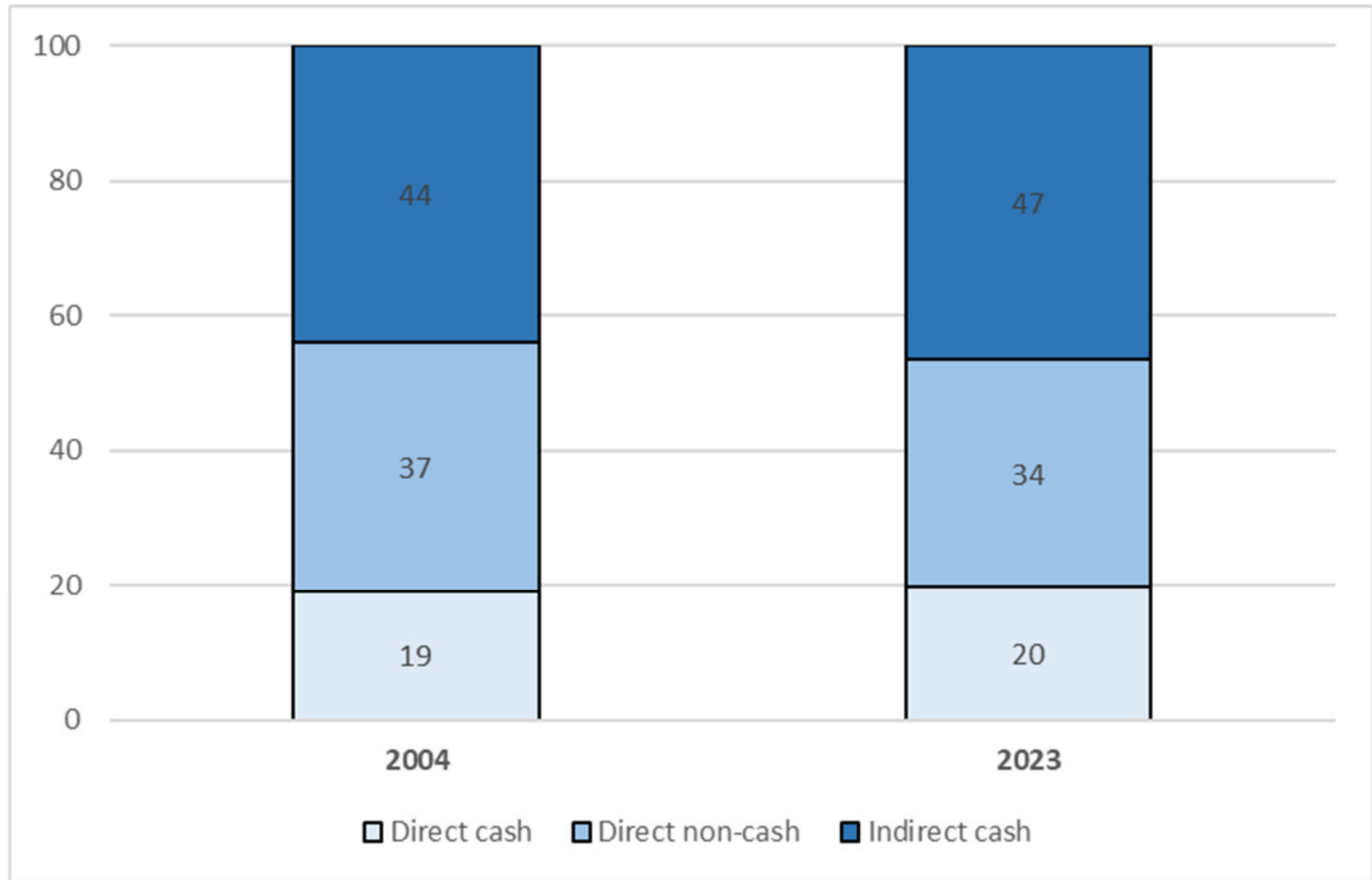
## Time comparison: Structure of public support for higher education, shares in %



## Structure of public support for higher education to private households 2023, shares in %



## Time comparison: Structure of public support for higher education to private households, share in %





## Summary

- In 2023, the public and private sector in Germany spent 59.8 billion Euro on higher education. This is an increase of 98% compared to 2004.
- The public sector accounted for 60% of total expenditure (+ 4 percentage points compared to 2004).
- 64% of public support was dedicated to HEIs, while the remainder (36%) went to private households. Thus, the institutional support increased by 6 percentage points.

## Summary

- State support to private households were made up as follows:
  - 20% direct cash support to students (+ 1 percentage point),
  - 34% direct non-cash support to students (- 3 percentage points),
  - 47% indirect cash support to students' parents (+ 3 percentage points).

## Summary

- In time comparison (2004 und 2023), the public sector has invested clearly more additional resources in higher education than the private sector.
- In doing so, the institutional support has increased more than personalised support.
- In terms of personalised public support, transfers in kind for students have increased the least (in percentage terms, they have even fallen).
- The – in international comparison – unusual high level of support for students' parents has increased further.

## Assessment of the findings

A few possible assessment criteria for higher education funding systems:

- Effectiveness
- Efficiency
- Transparency
- Steerability

## Assessment of the findings

- Effectiveness  
(here: Suitability of instruments to achieve sufficient funding of publicly supported students)
  - The largest share in personalised public support is geared at students' parents.
  - According to the last German Social Survey, nearly 83% of students reported to receive support from their parents/relatives (Kroher et al., 2023).
  - However, an effectiveness problem may arise, if students' parents do not want to support their studying children at all or less than the maintenance law provides for.

## Assessment of the findings

- Effectiveness

(here: Suitability of instruments to achieve sufficient funding of HEIs)

- Since many years, there has been empirical evidence that HEIs in Germany are underfunded (e.g. Wissenschaftsrat, 2008; Berthold et al., 2007; HRK, 2006).
  - The predecessor study (Schwarzenberger, 2008) has shown that in international comparison, Germany spent the lowest proportion of public funding on universities (as opposed to personalised public support).
  - Recent inflation, wage increases, and spending cuts in the public sector are putting additional financial pressure on universities (e.g. Arnold & Maennig-Fortmann, 2023; Vallbracht, 2024; Warnecke, 2024).
- Effectiveness in *funding of HEIs* is rather not achieved (due to lack of resources, not fundamental inadequacy of instruments).

## Assessment of the findings

- Efficiency  
(e.g. reaching a given target by minimum use of resources)
  - The German higher education funding system is based on a very large number of support items from various sub-systems such as the tax system, all branches of the social security system, the public transport system, etc.
  - Requires extensive bureaucracy and numerous internal administrative coordination processes.
- Thus, administrative costs of the funding system may not be the lowest possible.

## Assessment of the findings

- Transparency
  - Needed for better political and administrative control.
  - Needed to give potential demanders of public support a better overview of what is available to them.
- Due to the complexity of the funding system and the difficulties to quantify all public support items, transparency is not achieved.



## Assessment of the findings

- Steerability
  - The predecessor study (Schwarzenberger, 2008) has already shown that in Germany, direct cash support to students and indirect support to students' parents contradict each other in terms of counteracting social disparities.
  - No clear steering effect with respect to the Social Dimension of higher education.

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## Different forms of public subsidies by students' social background and living situation (in Euro for the year 2006; rounding differences may occur)

|   | Student living at home |                  |                   |          | Student not living at home |                  |                   |          |
|---|------------------------|------------------|-------------------|----------|----------------------------|------------------|-------------------|----------|
| Support                                   | Low SES                | Lower medium SES | Higher medium SES | High SES | Low SES                    | Lower medium SES | Higher medium SES | High SES |
| Grants                                    | 793                    | 427              | 265               | 132      | 1,735                      | 1,154            | 689               | 337      |
| Loan subsidy                              | 94                     | 55               | 33                | 13       | 203                        | 142              | 81                | 35       |
| Indirect support (excl. child benefit)    | 0                      | 264              | 251               | 597      | 0                          | 572              | 571               | 982      |
| Child benefit                             | 1,848                  | 1,848            | 1,848             | 1,848    | 1,848                      | 1,848            | 1,848             | 1,848    |
| Health care subsidy                       | 1,512                  | 1,512            | 1,512             | 1,512    | 1,512                      | 1,512            | 1,512             | 1,512    |
| Subsidy for facilities and transportation | 422                    | 422              | 422               | 422      | 422                        | 422              | 422               | 422      |
| Total                                     | 4,669                  | 4,527            | 4,330             | 4,523    | 5,720                      | 5,650            | 5,122             | 5,135    |