



Statistics in focus

POPULATION AND SOCIAL CONDITIONS

THEME 3 – 22/2003

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Public Expenditure on Education in the EU in 1999

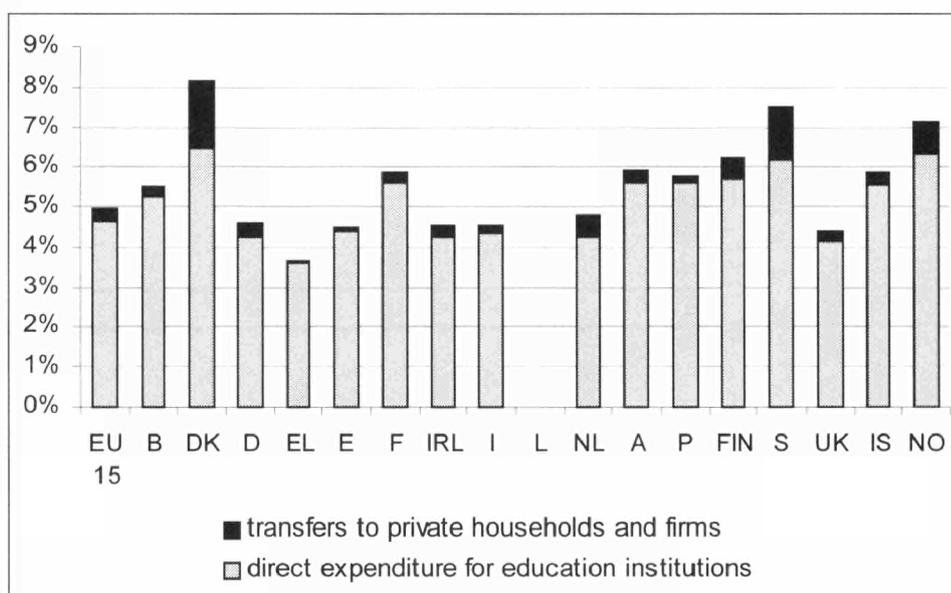
Pascal Schmidt

In knowledge societies, investment in education and training is an important priority. Acquiring and continuously updating and upgrading a high level of knowledge, skills and competencies is a prerequisite to keep human capital at a high level. This has been underlined also by the Lisbon European Council which has set in March 2000 the strategic goal for Europe to become by 2010 "the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion".

Government, private households, private firms and non-profit organisations all contribute to the financing of education. In the underlying publication, the public expenditure on education will be more closely examined as the government is to a large extent financing education (on EU 15 average 86 % of total expenditure on education). Data on private expenditure being incomplete for some countries comparisons of private expenditure have to be interpreted cautiously and therefore are not further examined in the present publication. However, Eurostat intends to include private expenditure as soon as comparability problems will be solved.

Generally, the public sector funds education either by bearing directly the current and capital expenses of educational institutions (direct expenditure for educational institutions) or by supporting students and their families with scholarships and public loans as well as by transferring public subsidies for educational activities to private firms or non-profit organisations (transfers to private households and firms). Both types of transactions together will be reported as total public expenditure on education.

Figure 1 : Total public expenditure on education as a percentage of GDP, by type of transaction, 1999.



In total, public resources invested in education at all levels represented an average of 5.0 % of the European Union's GDP in 1999, slightly less than in the two previous years. While this relative stability is reflected in the percentage of GDP allocated to education within individual countries, it varies considerably between these countries, ranging in 1999 from 3.6 % in Greece, to 7.5 % in Sweden and 8.1 % in Denmark. However, for a majority of countries, the figure is between approximately 4-6 % of the GDP (figure 1 and table 1).

As to the distribution of public expenditure on education by type of transaction, direct expenditure for educational institutions accounted in average for 4.7 % (EU 15) while 0.3 % of GDP were transferred to private households and firms.

Direct expenditure for educational institutions go from more than 6 % of GDP in Denmark and Sweden to 4.2 % in the Netherlands and the United Kingdom and 3.6 % in Greece.

Denmark and Sweden both spent more than 1 % while Spain, Portugal and Greece spent 0.1 % or less of their GDP on transfers to private households and firms.

However, when using the indicator total public expenditure on education as a percentage of GDP, it should be borne in mind that this indicator is influenced among others by such things as the organisational structure of the education system, the enrolment rates or the demographic structure of the population.

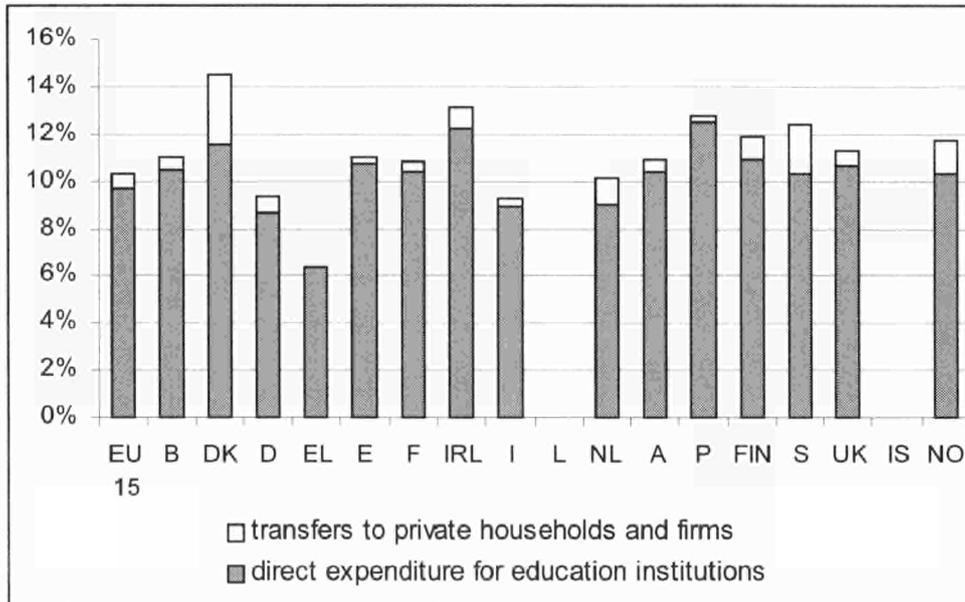
Table 1: Total public expenditure on education as a percentage of GDP, by type of transaction, 1999.

	Total public expenditure on education	of which:	
		direct expenditure for education institutions	transfers to private households and firms
EU15	5.0	4.7	0.3
B	5.5	5.3	0.3
DK	8.1	6.5	1.7
D	4.6	4.3	0.3
EL	3.6	3.6	0.0
E	4.5	4.4	0.1
F	5.9	5.6	0.2
IRL	4.6	4.3	0.3
I	4.5	4.4	0.2
L	:	:	:
NL	4.8	4.2	0.6
A	5.9	5.6	0.3
P	5.7	5.6	0.1
FIN	6.2	5.7	0.5
S	7.5	6.2	1.3
UK	4.4	4.2	0.2
IS	5.9	5.6	0.3
NO	7.2	6.3	0.8
EU15 includes the available countries.			

In 1999, 10.4 % of public budget was spent on education

On EU 15 average, the public sector spent 10.4 % of its budget for education. Again there is a large variation across countries. Denmark, Ireland, Portugal and Sweden all spent more than 12 % of their public budget on education while Germany, Greece and Italy spent less than 10 % (figure 2).

Figure 2: Total public expenditure on education as a percentage of total public expenditure, by type of transaction, 1999.



Expenditure was on average 5,222 EUR PPS per pupil/student in 1999

Expenditure per pupil/student measures how much central, regional or local levels of government, private households, or other private entities (firms etc.) spent per pupil/student. It includes expenditure for personnel, other current and capital expenditure.

For public institutions, averages for EU 15 were over 3,800 EUR PPS per pupil in primary education, more than 5,200 EUR PPS per pupil in secondary education, and around 7,900 EUR PPS per student in tertiary education. This means that expenditure per student at tertiary level was on average twice as high as at primary level (table 2).

The variation around these average figures across the countries is considerable, both in the level of expenditure per pupil/student and across levels of education. For instance at the tertiary level, expenditure per student varies

Table 2: Expenditure (from both public and private sources) per pupil/student in public institutions by level of education, (EUR PPS, 1999).

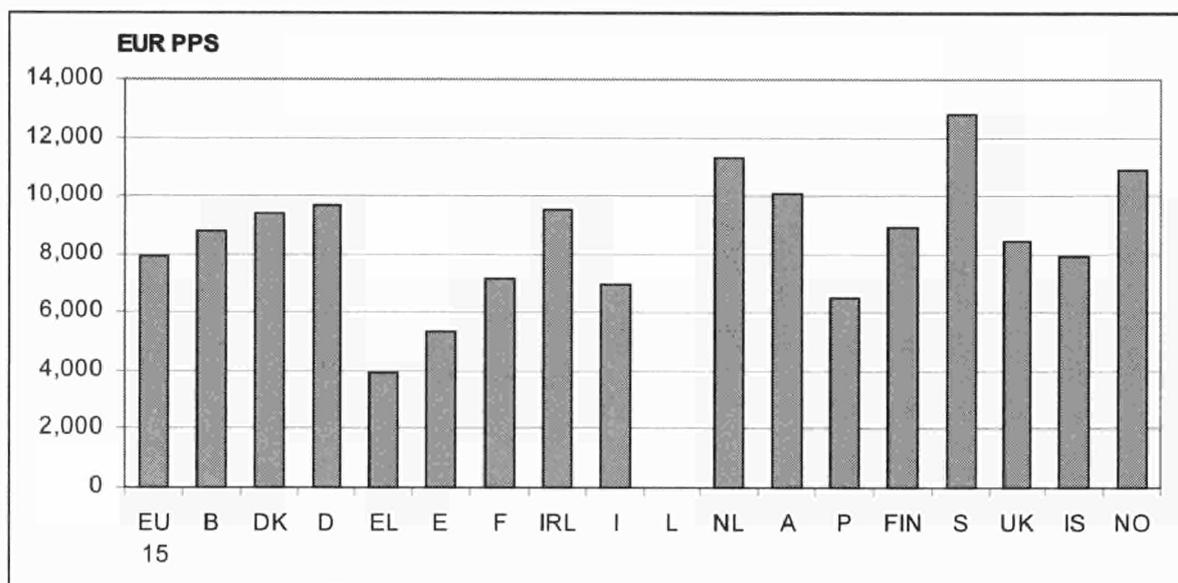
	Primary	Secondary	Tertiary	Total	Ratio Tertiary / Primary
EU15	3,858	5,267	7,937	5,222	2.1
B	4,212	6,487	8,773	5,807	2.1
DK	6,435	7,084	9,405	6,930	1.5
D	3,477	4,302	9,698	5,025	2.8
EL	1,997	2,756	3,913	2,903	2.0
E	3,828	5,235	5,374	4,570	1.4
F	3,946	7,148	7,139	5,682	1.8
IRL	2,735	3,924	9,552	4,165	3.5
I	4,898	5,979	6,962	5,959	1.4
L	:	:	:	:	:
NL	3,827	5,284	11,310	5,309	3.0
A	6,059	7,872	10,078	7,518	1.7
P	3,469	4,853	6,461	4,558	1.9
FIN	3,794	5,646	8,930	5,507	2.4
S	5,268	5,388	12,799	5,821	2.4
UK	3,364	4,618	8,433	4,716	2.5
IS	5,010	5,527	7,897	5,828	1.6
NO	5,849	6,887	10,912	7,456	1.9

EU15 include the available countries.

from a high of around 12,799 EUR PPS in Sweden and 11,310 EUR PPS in the Netherlands, to a low of 5,374 EUR PPS in Spain and 3,913 EUR PPS in Greece (figure 3). As to the pattern across education levels within countries, the contrast is most marked between countries such as Ireland, the Netherlands and

Germany on the one hand, and Spain, Italy and Denmark on the other. In Ireland, for instance, expenditure per student at the tertiary level is 3.5 times as large as that at the primary level. By contrast, Spain and Italy report this to be only 40 % higher at the tertiary compared with the primary level of education.

Figure 3: Expenditure (from both public and private sources) per student at the tertiary level in public institutions, (EUR PPS, 1999).



Expenditure per pupil/student compared to GDP per capita

The expenditure on education per pupil/student can also be compared to GDP per capita. Then, the resources being devoted to education in public institutions are related to the overall economic welfare of a country. An appropriate measure for this is the ratio of the expenditure per pupil/student to the country's GDP per capita. In average for the EU, the expenditure per pupil/student compared to GDP per capita at all levels combined amounts to 25 %. There is a wide range of variation across Member States, expenditure per pupil/student compared to GDP per capita varying from 32 % in Austria and 29 % in Portugal, to 20 % in Greece and 18 % in Ireland (table 3). This adds a new perspective to expenditure since in spite of the lower level of expenditure per pupil/student, a country like Portugal with lower GDP per capita spends much more in relative terms.

Table 3: Expenditure (from both public and private sources) per pupil/student in public institutions compared to GDP per capita, by level of education, 1999

	Primary	Secondary	Tertiary	Total
EU15	18	25	38	25
B	19	29	39	26
DK	25	28	37	27
D	15	19	43	22
EL	14	19	27	20
E	22	30	31	26
F	18	33	33	26
IRL	12	17	40	18
I	22	27	32	27
L	:	:	:	:
NL	16	22	46	22
A	26	33	43	32
P	22	31	42	29
FIN	18	26	42	26
S	24	25	59	27
UK	16	22	39	22
IS	20	22	31	20
NO	21	25	40	27

EU15 include all available countries.

79 % of current expenditure spent on staff costs

Expenditure on wages and salaries of teachers and other staff amounted to 79 % of current expenditure for EU 15. Other current expenditure on such things as teaching materials or building maintenance represented 21 % of current expenditure on education.

In EU 15, current expenditure accounted for 92 % of total expenditure while the remaining 8 % were spent on capital expenditure - for instance outlays on construction or renovation of buildings or purchase of new equipment (table 4).

The distribution of expenditure by resource category depends on such things as teachers' salaries, student to teacher ratio, whether educational institutions own or rent the buildings they use, pay for textbooks for the pupils/students or offer ancillary services (meals, dormitory) in addition to instruction.

Financial aid to pupils and students: the tertiary level receives 57 % of assistance

Financial aid to pupils/students corresponds to the transfers paid by the public sector to students in form of student grants, loans and child allowances contingent on student status. In 1999, it accounted for 6.1 % of the total public expenditure on education in EU 15. The bulk (57 %) of this aid went to students at the tertiary level. In terms of the total expenditure at a given level, direct financial aid amounted to 16.1 % of the public expenditure on education at the tertiary level, but only 3.7 % in average of public expenditure at the lower levels (table 5).

The apparent variation among the countries for the tertiary level is very large (figure 4). Direct financial assistance to students accounts for over 30 % of public expenditure on tertiary education in Denmark and Sweden, in contrast to 10 % or lower in France, Spain, Portugal and especially Greece (3 %).

When studying this large variation observed across countries, it is important to keep in mind the fact that the figures here refer only to direct public assistance to students in form of scholarships, public loans and family allowances contingent on student status. This is not a full measure of the level of assistance students may receive as for instance, students may also get financial support like loans from private banks, ancillary services (i.e. student welfare services such as meals, transportation, health care or dormitories) or tax reductions. The financial aid to pupils/students varies as the educational systems are different across countries.

Table 4: Breakdown by type of expenditure in public institutions (% , 1999).

	Total		Current	
	Current	Capital	Personnel	Other Current
EU15	92	8	79	21
B	:	:	:	:
DK	93	7	76	24
D	91	9	84	16
EL	80	20	83	17
E	90	10	86	14
F	91	9	80	20
IRL	91	9	80	20
I	92	8	76	24
L	:	:	:	:
NL	94	6	74	26
A	94	6	77	23
P	93	7	90	10
FIN	93	7	67	33
S	100	:	62	38
UK	94	6	69	31
IS	86	14	78	22
NO	88	12	78	22

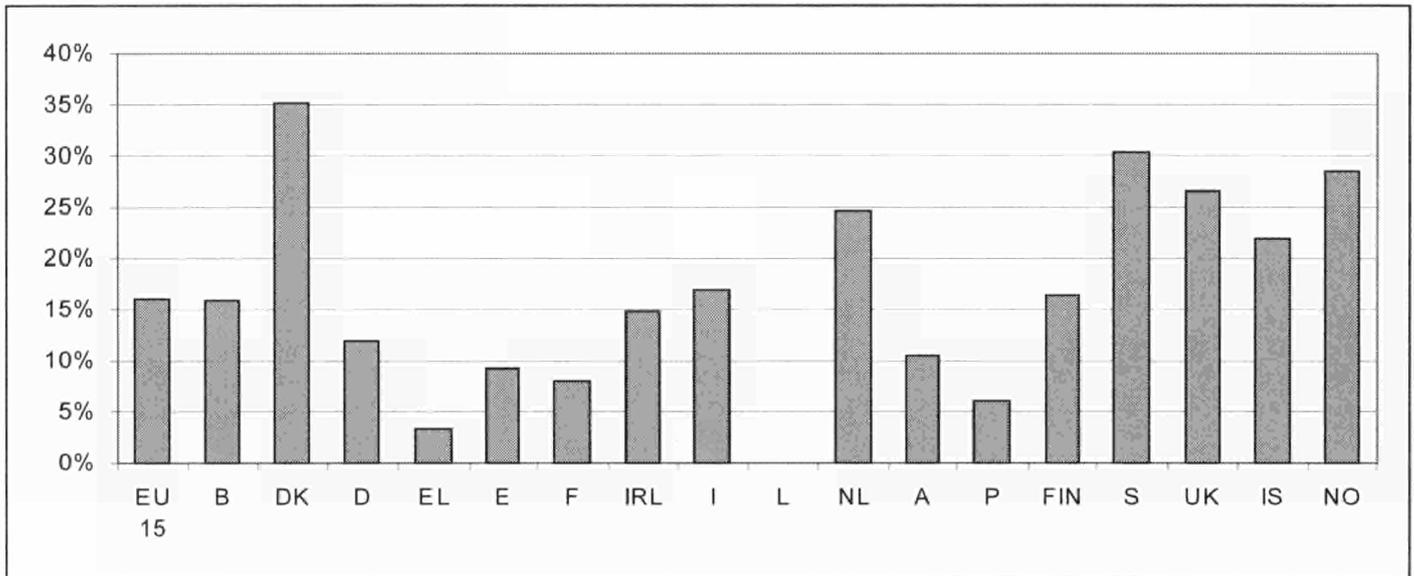
EU15 include all available countries.

Table 5: Financial aid to pupils and students as % of total public expenditure on education by level of education, 1999

	Primary + Secondary	Tertiary	Total
EU15	3.7	16.1	6.1
B	0.4	15.9	4.6
DK	14.7	35.2	20.6
D	6.7	12.0	7.1
EL	0.1	3.4	1.1
E	1.0	9.3	2.7
F	3.7	8.0	4.0
IRL	3.1	14.8	6.3
I	0.9	16.9	3.9
L	:	:	:
NL	7.4	24.6	11.6
A	0.7	10.4	3.5
P	1.3	6.0	2.1
FIN	10.2	16.4	7.8
S	22.8	30.4	17.1
UK	0.2	26.7	5.5
IS	1.2	21.9	4.9
NO	15.7	28.6	11.8

EU15 include all available countries

Figure 4: Financial aid to students as a percentage of total public expenditure on education at the tertiary level, 1999.



In most EU 15 countries, central government is the main public financier of education

Funds earmarked for education purposes are transferred between central, regional and local levels of government. They are reported as net flows.

Initial funds correspond to the share of total education spending made available by a level of government. Final funds are the share of total education expenses spent directly by a level of government. Both types of funds include direct public expenditure and transfers to the private sector.

In all cases but Denmark there is a net flow of resources from central government to regional and local levels. This means that, on the average, central government accounts for 50 % of total funding for education, but provides only 46 % of this funding directly to educational institutions (table 6).

The contribution of central government goes from over 90 % in Ireland, Greece, Portugal and the Netherlands to under 10 % in Belgium and Germany. Countries in which significant transfers of educational funds are made by central government to other levels of government include Ireland, the Netherlands, Austria and Finland.

The share of regional government funding before transfers is large in Belgium (at over 90 %), Germany (around 70 %) and Spain (65 %), but absent or negligible in Ireland, the Netherlands, Finland and the United Kingdom. It is below 10 % of total educational funding in

Table 6: Initial and final sources of public funding on education by level of government, 1999 in %

	initial funds			final funds		
	central	regional	local	central	regional	local
EU15	49.8	28.2	22.0	46.1	28.4	25.5
B	3.8	92.0	4.2	3.8	92.0	4.2
DK	45.3	7.7	47.0	47.9	8.1	44.0
D	9.9	71.5	18.5	8.0	69.1	23.0
EL	96.0	4.0	:	92.6	7.4	:
E	30.2	65.2	4.7	30.2	65.2	4.7
F	74.7	9.3	16.0	73.7	10.2	16.1
IRL	99.8	:	0.2	83.6	:	16.4
I	75.6	8.9	15.4	75.2	8.3	16.5
L	:	:	:	:	:	:
NL	93.8	:	6.1	79.9	:	20.1
A	71.7	9.5	18.8	49.7	30.1	20.1
P	95.1	4.9	:	95.1	4.9	:
FIN	55.5	:	44.5	31.8	:	68.2
S	:	:	:	:	:	:
UK	38.9	:	61.1	31.0	:	69.0
IS	41.5	:	58.5	40.7	:	59.3
NO	49.7	:	50.3	35.3	:	64.7
EU15 include all available countries.						

all other countries.

Generally, local government is a net recipient of transfers from central and regional governments. On average, this share increases from 22 % before transfers to 25 % after transfers.

This indicator reflects the degree of centralisation of educational funding which may give a hint whether a country is rather organised as a central or as a federal state.

➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

.....
: data not available.

Abbreviations: **EU 15** – the EU Member States; **B** – Belgium; **DK** – Denmark; **D** – Germany; **EL** – Greece; **E** – Spain; **F** – France; **IRL** – Ireland; **I** – Italy; **L** – Luxembourg; **NL** – the Netherlands; **A** – Austria; **P** – Portugal; **FIN** – Finland; **S** – Sweden; **UK** – the United Kingdom; **IS** – Island; **NO** – Norway.

Calculation of EU averages:

EU 15 averages are **weighted averages** taking into account the relative proportion of the public expenditure on education of each Member State for which data are available.

Another method to calculate averages is to determine the **simple average**. Then EU 15 would spent 5.5 % of its GDP and 11.2 % of its public expenditure on education. However, this method is questionable as it does not consider the absolute size of the education system in each Member State.

Data source The core information used comes from the UOE (UNESCO, OECD, Eurostat) questionnaire on education expenditure for the financial year 1999. Data source is Eurostat UOE, unless stated otherwise.

Classification of education:

ISCED International Standard Classification of Education (1997 version), available at the address:
http://www.uis.unesco.org/en/act/act_p/isced.html

Pre-primary education: ISCED level 0, Primary education : ISCED level 1; Secondary education : ISCED levels 2-4; Lower secondary education: ISCED level 2, Upper secondary education: ISCED level 3, Post-secondary not tertiary education: ISCED level 4, Tertiary education : ISCED levels 5-6, Non-universitary tertiary education: ISCED level 5B, University tertiary education: ISCED level 5A and 6.

PPS Where necessary, data are expressed in Purchasing Power Standards (PPS) in order to eliminate differences in price levels between Member States. The purchasing power parity rate between the PPS and each Member State's currency expressed the number of units of national currency that would be needed at any given moment to purchase in each country the same volume of goods and services that would be obtained with one PPS in the European Union. The PPS is Euro based.

GDP The figures relating to GDP are those forwarded to Eurostat by the Member States in accordance with the ESA 95 criteria.

Enrolment Enrolment data are available for the school year, in contrast to finance data which are available for calendar years. A weighted sum over two school years is therefore used to make the reference period correspond to the calendar year. The following are exceptions.

UK both enrolment and finance data refer to the tax year 1999/2000.

DK, EL, IRL, I, NO enrolment data only for 1998/99.

P, IS enrolment data only for 1999/2000.

Data coverage:

F : throughout, data exclude the overseas departments (DOM).

Table 1: EL: primary includes also pre-primary education.
NO: primary includes also lower secondary education.

Table 2: NL, UK: public and government-dependent private institutions.
EL: primary includes also pre-primary education.
NO: primary includes also lower secondary education.

Table 3: S: Capital expenditure is included under current expenditure.

Further information:

➤ Databases

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