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The Quality Imperative

Teachers'salaries

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Teachers' salaries

Teachers' salaries from a policy perspective

Although the relation between educational investments and student outcomes is not straightforward, insufficient resources impair the quality of schooling

Although there is no straighforward relationship between the resources governments invest in their education systems and student performance (Hanushek 2002, OECD 2002b), there is evidence that below certain thresholds in resources the quality of schooling deteriorates, including a negative impact on the quality of outcomes (Mehrotra and Buckland, 1998; Siniscalco and Ross, 1997).

Educational policy has recognised the link between the status of teachers and the status of education…

In the recent policy debate on the balance between investments and returns in education, the critical role that teachers play in educational quality and improvement has been repeatedly acknowledged (ILO 2000). Policy makers have generally recognised the interdependence between the status of teachers and the status of education already stated in the *Recommendation concerning the Status of Teachers* adopted by UNESCO and ILO in 1966.

As in all jobs requiring a qualification that leads to access to different career paths, the conditions of service offered to teachers, including their salaries and pay scales, have a significant impact on the composition of the teaching force and upon the quality of teaching. The relative level of teachers' salaries and the availability of salary increases during the course of their careers can affect the decision by qualified individuals to enter, or to remain in, the teaching profession.

One of the guiding principle stated in the UNESCO/ILO *Recommendation concerning the Status of Teachers* is that working conditions should be such that they will enable teachers to concentrate on their professional tasks and promote effective learning by students. In particular, salaries should provide teachers with the means to ensure a reasonable standard of living and to invest in further professional development; they should reflect the importance of the teaching function and take into account the qualification and experience required by teachers together with the responsibility they carry; and they should compare positively with salaries paid in other occupations requiring similar qualifications.

... but is often called to operate under tight fiscal constraints

However, the pressure to improve the quality of education is often under tight fiscal constraints and teachers' salaries and allowances together are the single largest factor in the cost of providing education, accounting for two-thirds or more of current public expenditure on education in most countries (UNESCO, 1998; Annex, Table 14). The result is that while teachers cost too much to the state, in many developing countries they earn too little, their incomes not having the characteristics stated in the *Recommendation*, thus forcing them to have other working activities aside teaching or to live below the poverty line (Mehrotra and Buckland, 1998).

Teachers' salaries – absolute and relative levels

Annual statutory teachers' salaries

Most governments use a standard salary scale to pay the teachers whom they employ

Most governments use a standard salary scale which they set directly or agree through negotiation with teachers' organisations. Often there is one salary scale for primary teachers and a second (with higher levels of compensation) for secondary school teachers. The main feature for a uniform salary scale is usually that a teacher's pay depends upon his or her educational qualifications and years of experience.

There are OECD/UNESCO data enabling comparisons to be made between the annual statutory teachers' salaries at the beginning of the career, after 15 years' experience and at the top of the scale[1], by level of education taught for various countries[2]. Salaries have been presented in absolute terms expressed in equivalent US dollars converted using purchasing power parities (PPPs), in order to allow comparison among countries of teachers' ability to purchase a common set of goods and services (Figures 1 and 2).

Statutory salaries, as reported here, refer to scheduled salaries in accordance with official pay scales and should therefore be distinguished from the actual wage bills incurred by governments and the average salaries of teachers because they are not affected by factors such as the age composition of the teaching force or the prevalence of part-time work and are more comparable across countries.

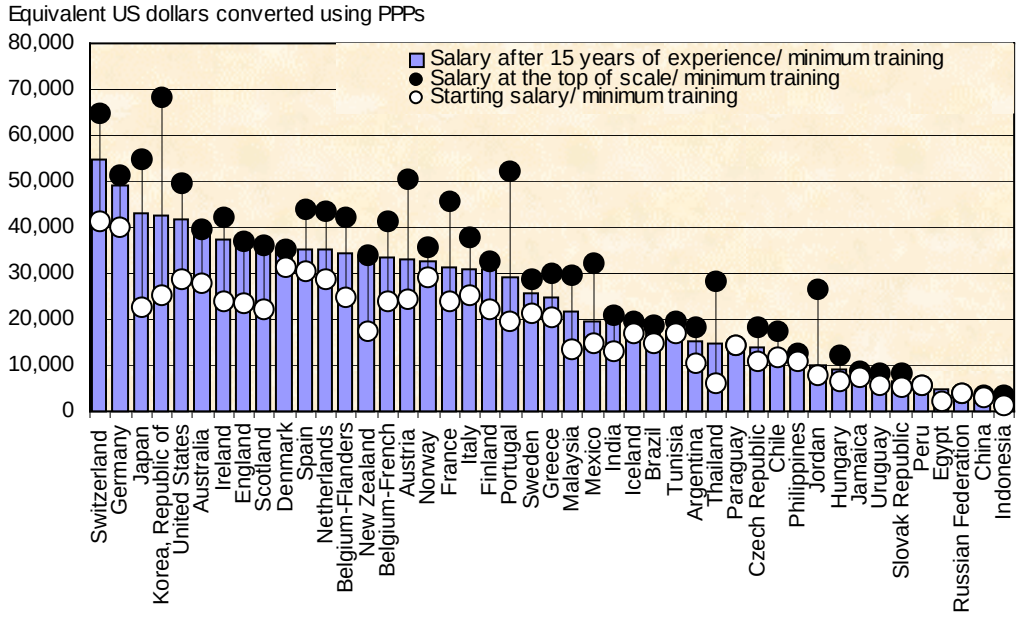
[1] Reported salaries are defined as the sum of wages minus the employer's contribution to social security and pension. Salaries are before deductions for income taxes. Bonuses that constitute a regular part of the salary (such as a 13th month, holidays or regional bonuses) are included in the figures. The starting salaries reported refer to the average scheduled gross salary per year for a full-time teacher with the minimum training necessary to be fully qualified at the beginning of his or her teaching career. Salaries after 15 years' experience refer to the scheduled annual salary of a full-time classroom teacher with the minimum training necessary to be fully qualified and with 15 years' experience. The maximum salaries reported refer to the scheduled maximum annual salary (top of the salary scale) of a full-time classroom teacher with the minimum training to be fully qualified for his or her job.

[2] Countries for which data were available are those taking part into the World Education Indicators (WEI) programme The WEI programme built on the OECD indicators programme and was launched in 1997 by eleven countries (Argentina, Brazil, Chile, China, India, Indonesia, Jordan, Malaysia, the Philippines, the Russian Federation and Thailand) together with OECD and UNESCO and with financial support from the World Bank. Other countries, including Egypt, Jamaica, Paraguay, Peru, Tunisia and Uruguay, joined later).

There are huge differences between countries in the salaries paid to teachers even after adjustment for differences in purchasing power parities

Even after converting national currencies in purchasing power parities, there remain huge gaps between the salaries of teachers in the countries at the higher and lower ends of the distribution, respectively. In Indonesia, the salary of a lower secondary teacher with 15 years of experience is more than 20 times lower than that of a teacher in Ireland, Australia, United States, Korea, Japan, Germany and Switzerland (Figure 1).

Figure 1: Annual statutory teachers' salaries in public institutions in lower secondary education, 2001 (PPP$)



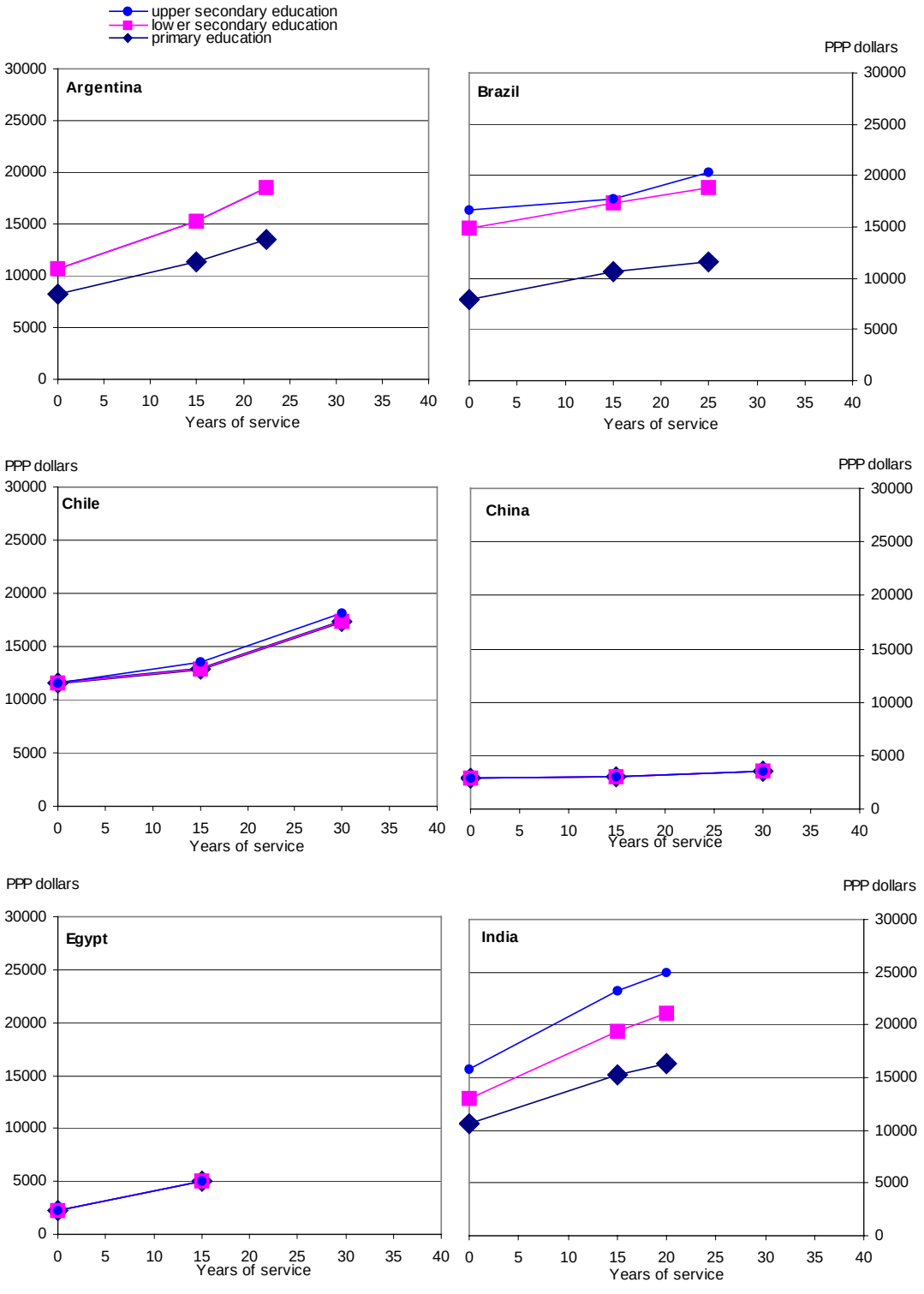
Source: OECD, 2003 and OECD, 2002a.
Countries are ranked in descending order of teachers' salaries in lower secondary education after 15 years of experience.

Even developing countries differ significantly in the salaries they pay to their teachers

Among the developing countries for which comparable data are available, the annual statutory salary of primary teachers with 15 years of experience ranges from below PPP$ 3 000 in China and Indonesia to over PPP$ 14 000 in India[3], Malaysia and Thailand (Figure 2). In turn, even in these last two countries, the mid-career salary level is less than half of the average mid-career salaries among OECD countries.

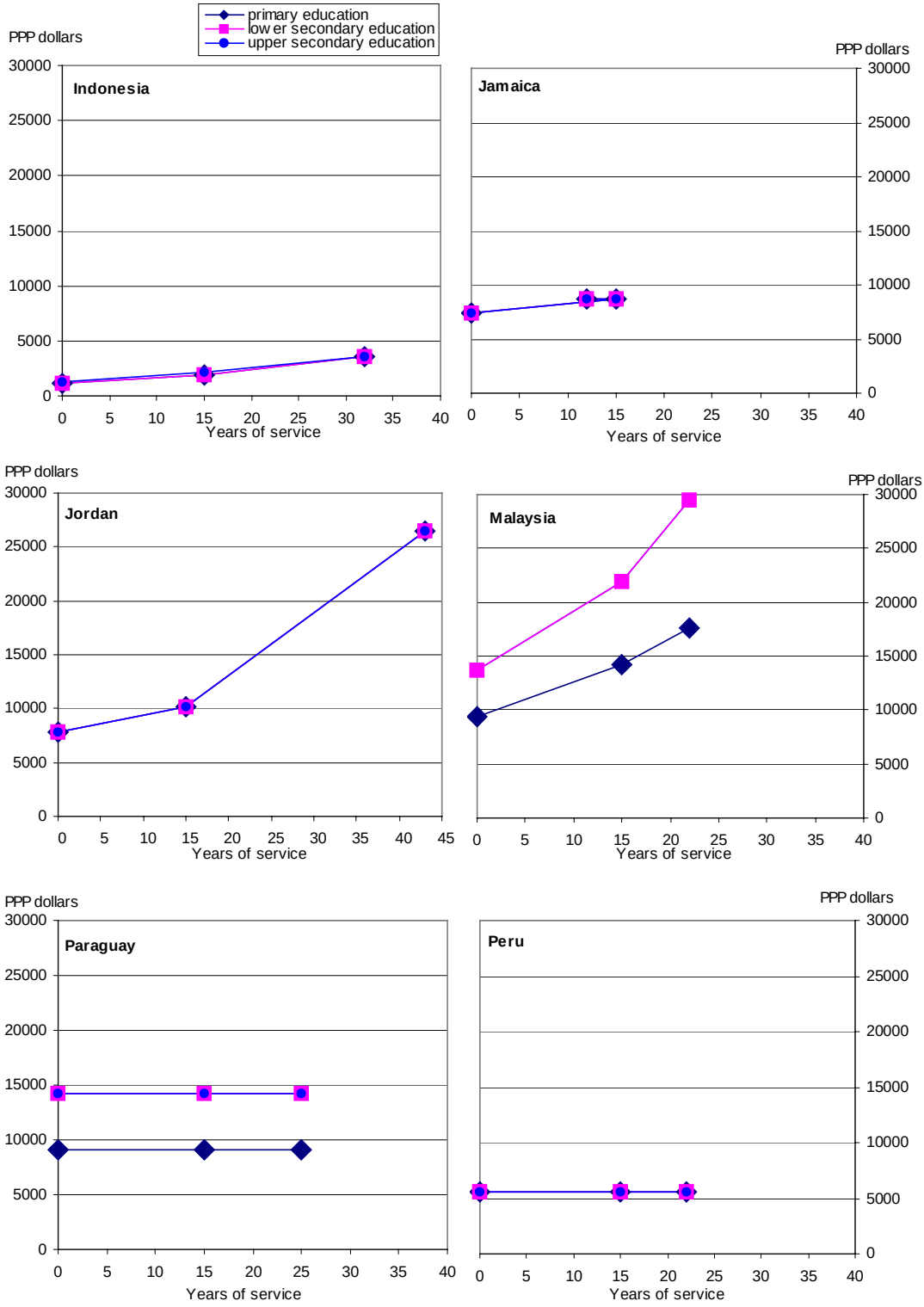
[3] For India, salaries are those in the National Capital Territory of Delhi.

Figure 2: Annual starting, mid-career and maximum statutory teachers' salaries in selected countries by level of education and years of service, 2001 (PPP$)



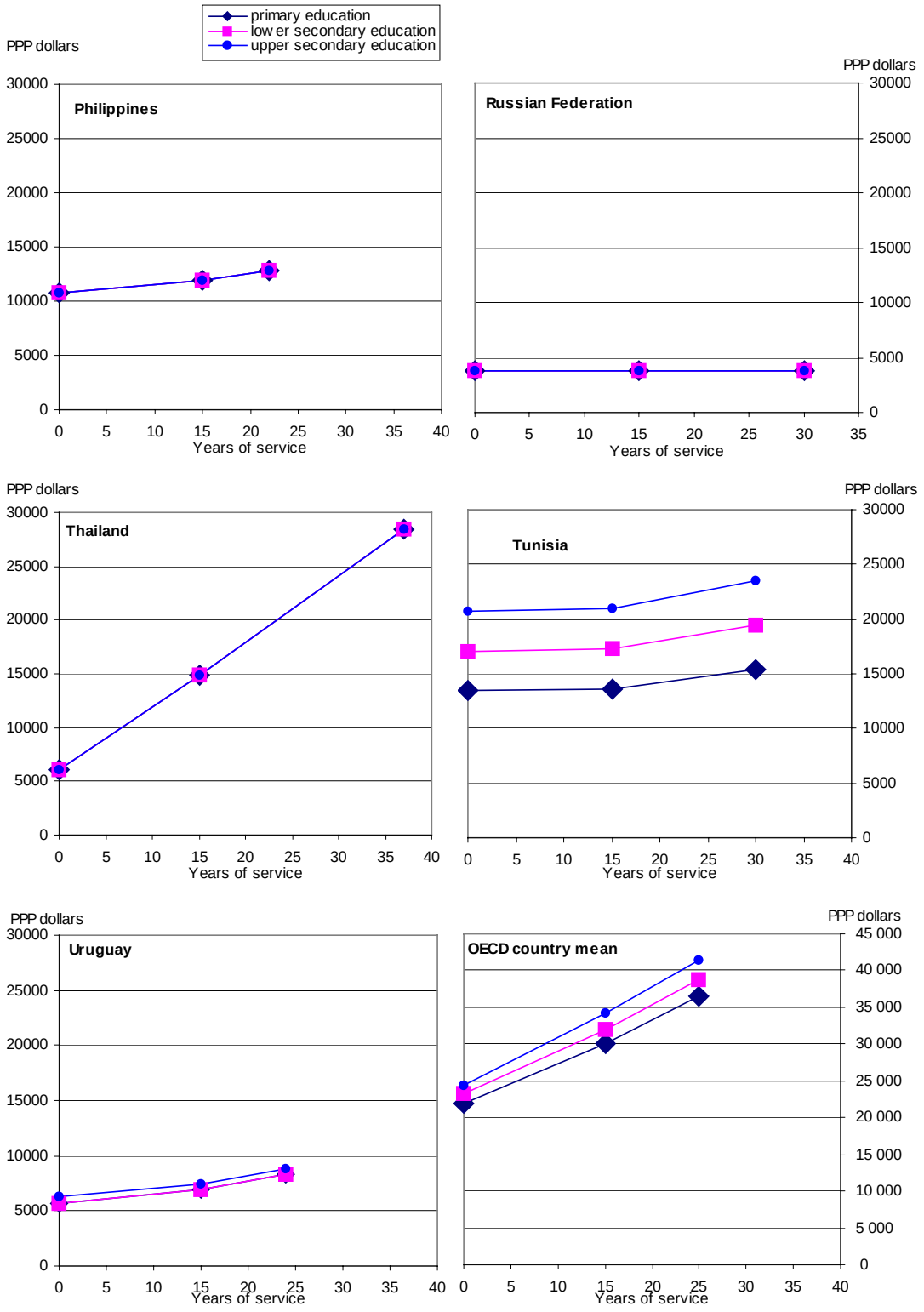
Source: OECD, 2003; OECD, 2002a.

Figure 2 (continued): Annual starting, mid-career and maximum statutory teachers' salaries in selected countries by level of education and years of service, 2001 (PPP$)



Source: OECD, 2003; OECD, 2002a.

Figure 2 (continued): Annual starting, mid-career and maximum statutory teachers' salaries in selected countries by level of education and years of service, 2001 (PPP$)



Source: OECD, 2003; OECD, 2002a.
The year of reference is 2000 for China, India, Jordan, Malaysia, Peru, Russian Federation.

At the secondary level, salaries after 15 years' experience range from below PPP$ 3 000 in China and Indonesia to over PPP$ 20 000 in India (upper secondary level), Malaysia and Tunisia[4] (upper secondary level), against an OECD average of almost PPP$ 32 000 in lower secondary education and more than 34 000 in upper secondary education.

Some countries reward teachers' experience…

Comparing gross teachers' salaries among countries at different points of the teaching career, provides information on the extent to which teaching experience influences salary scales within countries. In Thailand, a teacher at the top of the salary scale (reached after 37 years of service) earns almost five times as much as a teacher entering into the profession. Other countries with large increases in salaries, with respect to starting salaries, during the career, are Indonesia and Jordan (with over 3 times salary increases along the career) and Malaysia (where salaries at the top of the scale are more than twice as much starting salaries). These differences are an indication of the value attached to teaching experience and the incentives given for experienced teachers to remain in the profession.

... while other countries pay the same salary to teachers independent of the number of years of service

However, there are also countries with small differentials or no differentials at all. For example in Paraguay, Peru and Russian Federation salaries do not change over the course of a teacher's career for those with the minimum training (i.e. with no pedagogical qualification) and in Jamaica, the Philippines and Tunisia they increase by less than 20% from the beginning of the career to the top of the salary scale.

Market forces contribute to determine the attractiveness of the teaching profession

The fact that in some developing countries the differentials between maximum and initial salaries are considerably larger than those in OECD countries (where the difference is on average 1.7 times) reflects a higher premium for staying in the teaching profession. This in turn may be linked to the situation of the economy which contributes to determine the attractiveness of teaching as an occupation. While teaching may be one of the few occupations designed for individuals with higher levels of education in some developing countries, as other areas of the economy begin to develop there is likely to be an exodus of the best-qualified teachers into more attractive positions, unless spcific measures are taken.

In some countries, upper secondary teachers are paid more than 50% more than primary school teachers

Teacher salaries may also be higher for teachers in the higher levels of education. In Brazil, India, Malaysia, Paraguay and Tunisia the salaries of experienced upper secondary teachers are more than 50 higher than those of their primary school colleagues and in Argentina the difference amounts to 34 per cent. In most cases, the variations in teachers' salaries betweeen levels of education reflects a higher qualification required to enter the profession at the secondary level. In the remaining eleven countries for which comparable data are available, conversely, the statutory salaries of teachers with 15 years of experience and minimum qualifications are the same or do not differ by more than 20% between primary and upper secondary levels.

[4] Salaries in Tunisia include additional bonuses.

Statutory salaries per teaching hour

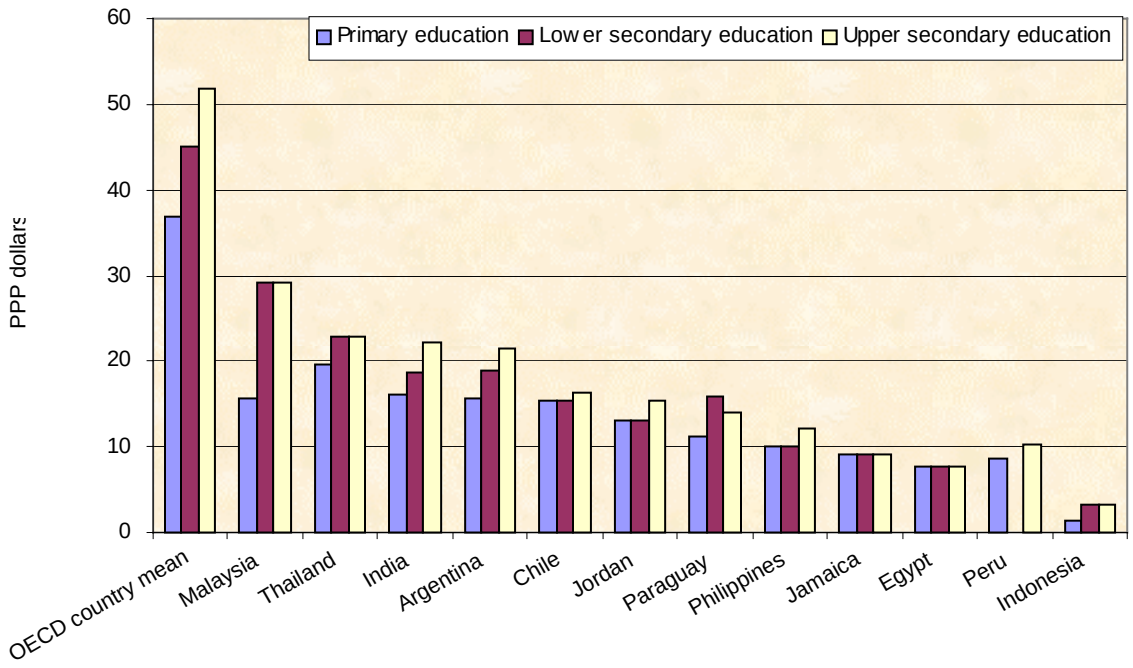
The salary per hour of teaching provides an alternative measure of the cost of teaching

An alternative measure of salaries and the cost of teaching time is the statutory salary for a full-time teacher in relation to the number of hours he or she is required to teach per year. Although this measure does not take into account the time teachers are required to spend in various other teaching-related activities, it can provide an estimate of the cost of the actual time teachers spend in contact with students.

Between countries disparities increase when teachers' salaries are related to the number of teaching hours

Among the developing countries for which comparable data are available, the salary per teaching hour of an experienced teacher (after 15 years of service) ranges, in primary education, from 1 PPP dollar in Indonesia to PPP$ 20 in Thailand and, in secondary education, from PPP$ 3 in the former country to PPP$ 23 and 29 in Thailand and Malaysia, respectively, against an average in OECD countries of PPP$ 37 in primary education, and PPP$ 45 and 52 in lower and upper seconday education, respectively (Figure 3). Other countries are somewhere in between these values, with Chile, Egypt, Jamaica, Jordan, Paraguay, Peru and the Philippines paying their teachers from PPP$ 8 to PPP$ 16 per hour of teaching.

Figure 3: Salary per hour of teaching after 15 yers of experience (PPP$)



Source: OECD, 2003; OECD, 2002a.
The year of reference is 2000 for India, Jordan, Malaysia, and Peru.
Countries are ranked in descending order of salary per hour of teaching.

Adjustments to base salaries

Additional bonuses allow increasing base salaries for rewarding teachers with specific profiles in terms of qualifications, performance, tasks or working conditions

Many countries have developed incentive schemes for teachers that allow adjusting the remuneration of teachers without altering the basic government scales. An adjustment to basic salary is defined as any difference in salary between what a particular teacher receives as payment for work performed at a school and the amount that he or she would receive on the basis of the numbers of years of service alone. Such adjustments may serve different aims, such as attracting better candidates to the teaching profession (i.e. with higher than minimum qualifications or certification), rewarding teachers who take on responsibilities or duties beyond statutory norms, encouraging teachers to improve their performance, or attracting teachers into subject areas where demand is higher than supply, such as science and mathematics, or to certain locations, where there is a scarcity of applicants.

Additional bonuses range from negligible amounts up to 30% or more of total salaries

While in some countries bonuses do not add much to total salaries in others, such as Chile, Indonesia and Uruguay, in some cases they amount to over 30% of total gross salaries (OECD, 2001). In Table 1 the criteria regulating the award of bonuses to teachers are shown. Adjustments may be awarded to all teachers who satisfy the relevant condition (indicated by a A in Table 1), with discretion to some teachers (S) or in exceptional circumstances only (R). Moreover, they may be temporary (T) or permanent (P).

All countries but one pay additional bonuses to teachers working in difficult circumstances

All countries for which comparable data are available, with the exception of Zimbabwe, provide monetary incentives to teachers working in difficult circumstances, including disadvantaged, remote or high cost-areas. Several countries apply task-based criteria in awarding additional bonuses, such as management responsibilities in addition to teaching duties and teaching more classes and or hours than required by the statutory full-time contract. About two thirds of the countries reward teachers holding an initial qualification or a teaching certification higher than the minimum required of prospective teachers. Finally four countries reward individuals with outstanding performance in teaching, on a temporary basis in the case of Chile, Paraguay and the Philippines and on a permanent basis in the case of Malaysia.

Table 1 – Criteria for awarding bonuses for teachers in public schools, 2001

		Argentina	Brazil	Chile	Indonesia	Jordan 1	Malaysia	Paraguay	Peru	Philippines	Thailand	Uruguay	Zimbabwe
Qualification	Holding an initial educational qualification higher than the minimum one required		AP		AP	AP	AP		AP		AP		AP
	Reaching high scores in the qualification examination										AP		
	Successful completion of professional development activities		AP		ST			AP					
	Holding a higher than minimum level of teacher certification		AP		ST	AP	SP	AP		AP	AP		
Task	Management responsibilities in addition to teaching duties		AT	AP	ST	AP	AT		AT			ST	AP
	Teaching courses in a particular field (e.g. mathematics or science)				ST	AP	SP						
	Teaching students with special educational needs						ST			SP		SP	
	Teaching more classes or hours than required by a full-time contract				ST	AT			AT		AT	SP	
	Special tasks				ST	AT							
Welfare	Family status (e.g. married, N of children)	ST			AP	SP			AP		~	AT	~
	Age (independent of years of teaching)				AP								
	Teaching in disadvantaged, remote or high cost area (location allowance)	AT	AT	AP/T	RP	AT	ST	ST	AT	RT	RP	SP	
Merit	Outstanding performance in teaching			AT			AP	AP		AT			AP
Other	Other	ST/AT	AP						AP		RP		

Legend – A: Adjustments is given all the time or most of the time
S: Adjustment is given occasionally
R: Adjustment is rarely given

P: Permanent salary adjustment
T: Temporary salary adjustment

1. Year of reference is 1998 for Jordan.

Source: OECD/UNESCO database.

Teachers' salaries relative to GDP per capita

The ratio of teachers' salaries to GDP per capita is used as a proxy for the financial standing of teachers…

Comparing statutory salaries of teachers against GDP per capita provides an indication of the extent to which a country invests in teaching resources, relative to the financial ability to fund educational expenditure. In the absence of comparable information on the salaries of other highly skilled professions that could be used as points of comparison with teachers' salaries, GDP per capita is often used as a proxy for the financial standing of teachers.

... although that ratio partially depends on a country's level of development

However, it must be taken into account that the ratio of teachers' salaries to income per capita reflects patterns of relative productivity that vary greatly between sectors in relation to a country's level of development. This ratio is generally higher in developing than in more developed countries because of the greater productivity in the service sector compared with the rest of the economy. As income per capita increases, the education of an average income earner rises relative to teachers' education, while the ratio of teachers' salaries to GDP per capita tends to fall (Cox Edwards, 1993).

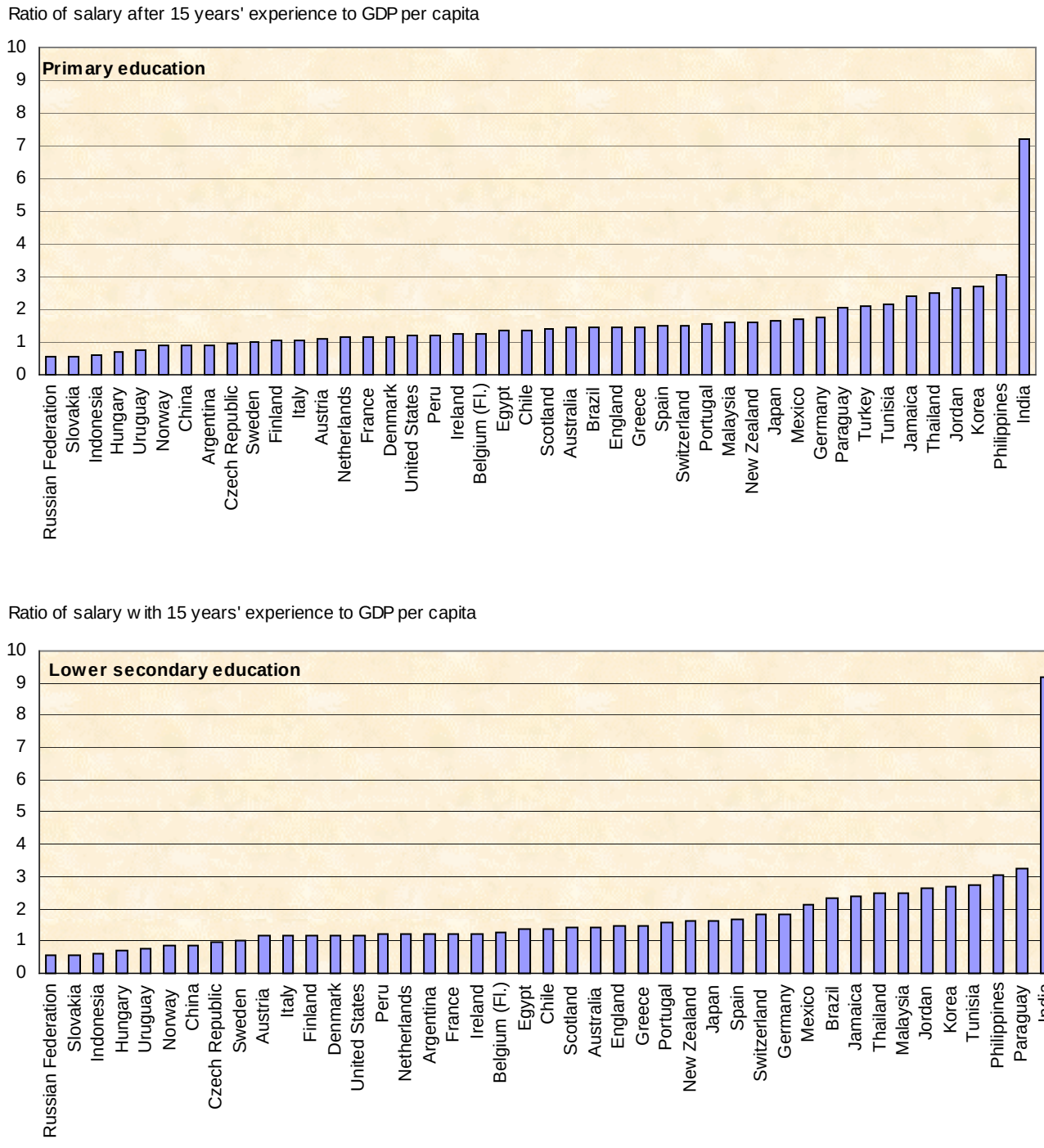
Starting teachers' salaries are above GDP per capita in the majority of developing countries for which comparable data are available...

Unlike what happens in the majority of OECD countries, starting salaries for teachers with the minimum required qualifications are above the GDP per capita in 9 our of 13 developing countries for which comparable data are available at both primary and secondary levels and they are more than twice GDP per capita in Jamaica, Paraguay, Philippines and Tunisia. At the opposite end of the distribution, Indonesian teachers are paid less than 40% of GDP per capita and in Argentina, Egypt and Uruguay they are paid less than 70% of it.

... and salaries after 15 years' experience are more than twice the GDP per capita in the majority of these countries

Mid-career salaries of teachers with the minimum level of training exceed twice the national per capita income in Brazil (at the secondary level), India, Jamaica, Jordan, Korea, Mexico (at the secondary level), Paraguay, the Philippines, Thailand, Tunisia and Turkey (Figure 4). At the opposite end of the distribution, mid-career salaries do not reach 70% of GDP per capita in Indonesia, the Russian Federation, Hungary and Slovakia.

Figure 4: Statutory teachers' salaries relative to GDP per capita in primary and upper seconday education, 2001

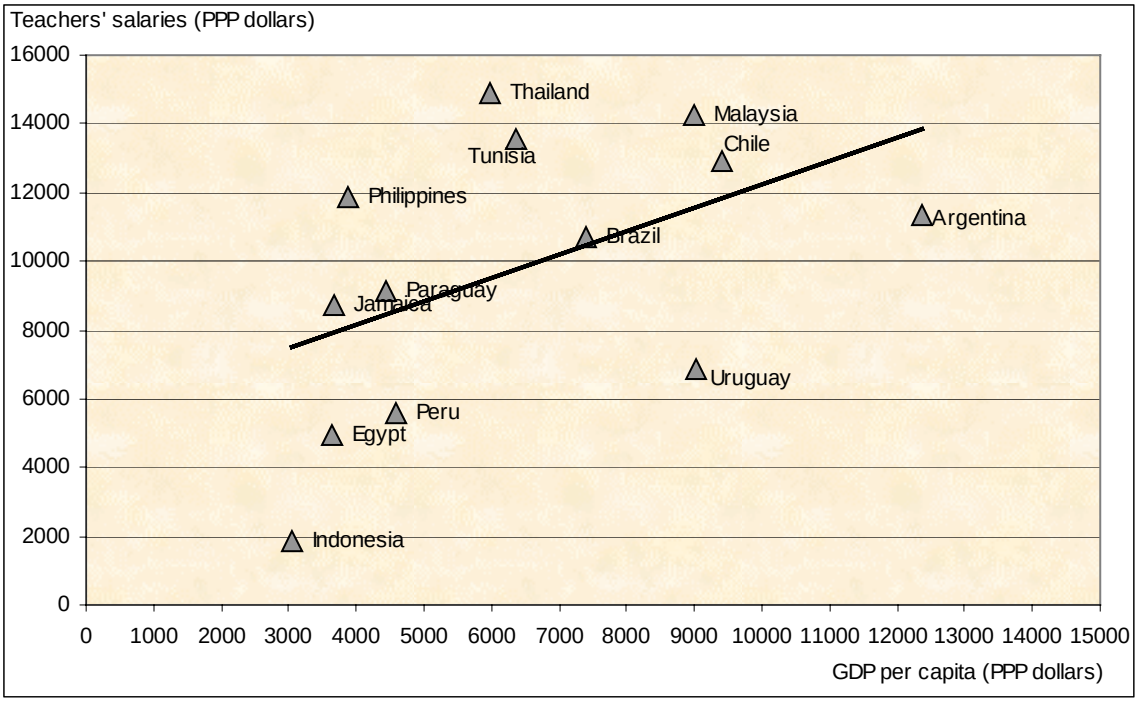


Source: OECD, 2003 and OECD, 2002.
The year of reference is 2000 for China, India, Jordan, Malaysia, Peru, Russian Federation.
Countries are ranked in ascending order of ratio of salary to GDP per capita.

Comparing salaries with GDP per capita allows detecting different patterns

By comparing teachers' salaries with income per capita it is possible to see that while some countries such as Indonesia, Egypt and Peru have both low GDP per capita and low teachers' salaries, the Philippines has a low GDP per capita but pays its teachers comparatively high salaries. Conversely, among the countries with relatively high GDP per capita, Uruguay and to a lesser extent Argentina spend a below average proportion of their wealth on teachers' salaries while Malaysia spends an above-average proportion of its comparatively high GDP per capita on teachers' salaries.

Figure 5: Mid-career salaries for primary teachers and GDP per capita, 2001



Source: OECD, 2003; OECD/UNESCO, database.

Teachers' salaries relative to the earning of other workers

The level of teachers' salaries depends on the salaries of other workers with similar qualifications

Ultimately, whether salaries are perceived as low or high in a country depends on how well other workers are paid. Even though teachers' salaries may be low in comparison with those of other countries, if they are high in relation to what might be paid in similar jobs in their own country, teachers are likely to consider themselves well paid.

In general, teachers' salary scales reflect government policies towards public servants. If these are disadvantageous in relation to the private sector or other employment opportunities, the public labour force tends to be of lower quality, although the whole package of fringe benefits should be taken into account when teachers' compensation conditions are compared. In certain

circumstances, in fact, qualified individuals may be attracted to teaching, even if salaries are relatively low, because of good job security, advantageous working conditions, or the possibility to access national medical insurance and pension schemes.

Teachers salaries are often lower than those of other tertiary qualified public employees

Data from a survey conducted in 1999 by EUROSTAT and OECD allow comparing secondary teachers' salaries with those of other public sector professions[5] which require a tertiary level qualification, for OECD countries.

In half or more of the countries, town planners, civil engineers, executive officials with tertiary qualifications, agricultural scientists and university lecturers earn more than secondary teachers (OECD, 2003). These data, however, refer only to employees in the public sector, while it is the private one that offers a bigger range of opportunities and therefore plays a more important role in shaping the labour market for individuals with a tertiary qualification.

The unfavourable position of teachers in relation to other qualified professional in both developed and developing countries has also been reported by ILO (ILO, 2000).

The evolution of teachers' salaries over time

Teachers salaries remained stable or increased during the 1990s in developed countries, although in most cases they grew more slowly than GDP per capita…

Analyses of the change (inflation adjusted) in the salaries of teachers during the 1990s showed that in the majority of developed countries teachers' salaries remained stable or increased (ILO, 2000; OECD, 1998). However, the comparison of the changes in teachers salaries and GDP per capita during the second half of the 1990s (1996-2000) in the OECD area shows that teachers salaries have, in general, grown more slowly than GDP per capita, while the opposite is true for the Czech Republic, Germany Italy, Japan, Mexico and New Zealand, where teachers' salaries grew faster than GDP per capita (OECD, 2003).

... while they deteriorated in some developing countries often in relation to the impact of macro-economic factors

The picture is more mixed when countries with lower level of income are considered. From evidence from the ILO October Inquiry it can be seen that while in high- and many middle-income countries teachers' salaries increased or remained stable between 1990 and 1998, in low-income countries they continued to deteriorate due to fiscal difficulties and structural adjustements policies (Figure 6).

More recent trend data confirm this pattern, with industrialised countries exhibiting positive values for the index of change in teachers' salaries between 1998 and 2001 and developing countries such as Argentina and Indonesia displaying negative values, showing the impact of financial crises on changes of teachers' salary levels over time (Figure 7)[6].

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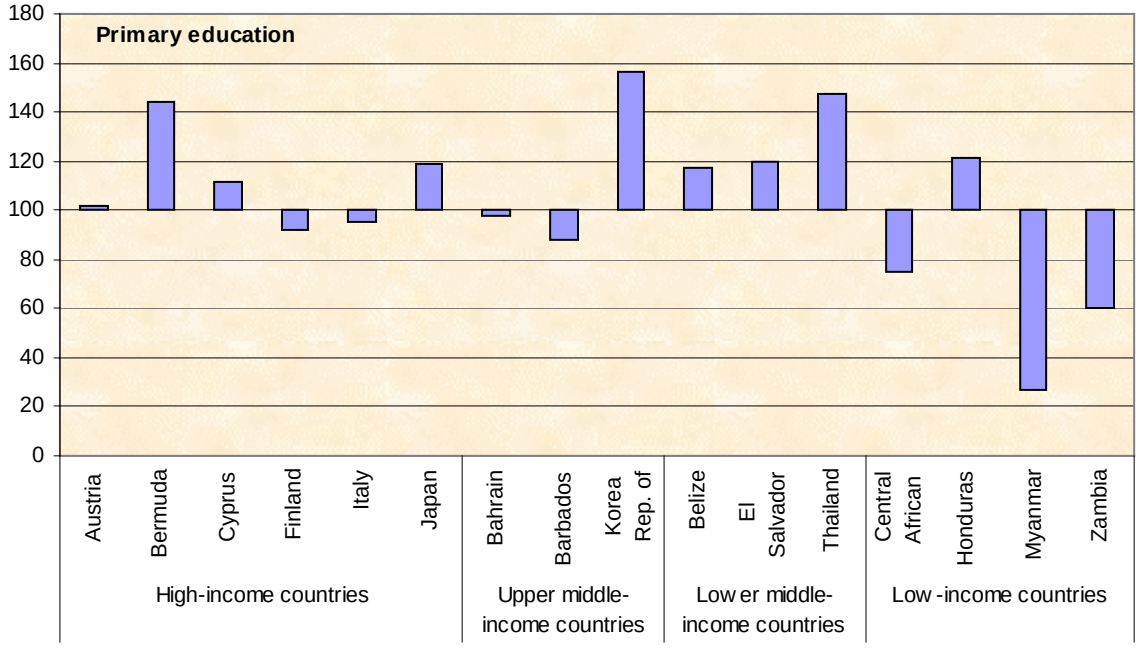
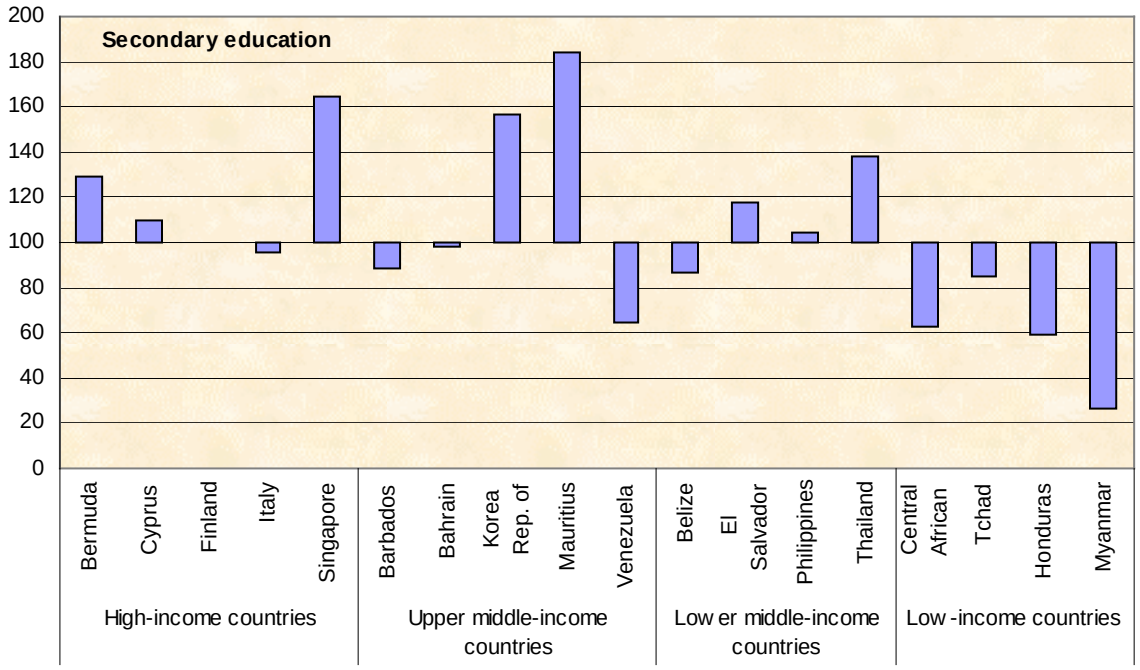
[5] Survey of Compensation of Employees for Selected Occupations in General Government (EUROSTAT-OECD PPP Programme). Definitions of selected occupations have been taken from the 1988 version of the International Stabndard Classification of Occupations (ISCO) of the International Labour Office (Categories 1 to 3).

[6] The index of change was calculated as teachers' salary 2001 in national currency * 100 / teachers'salary in 1998 * GDP deflator 2001 (1998=100).

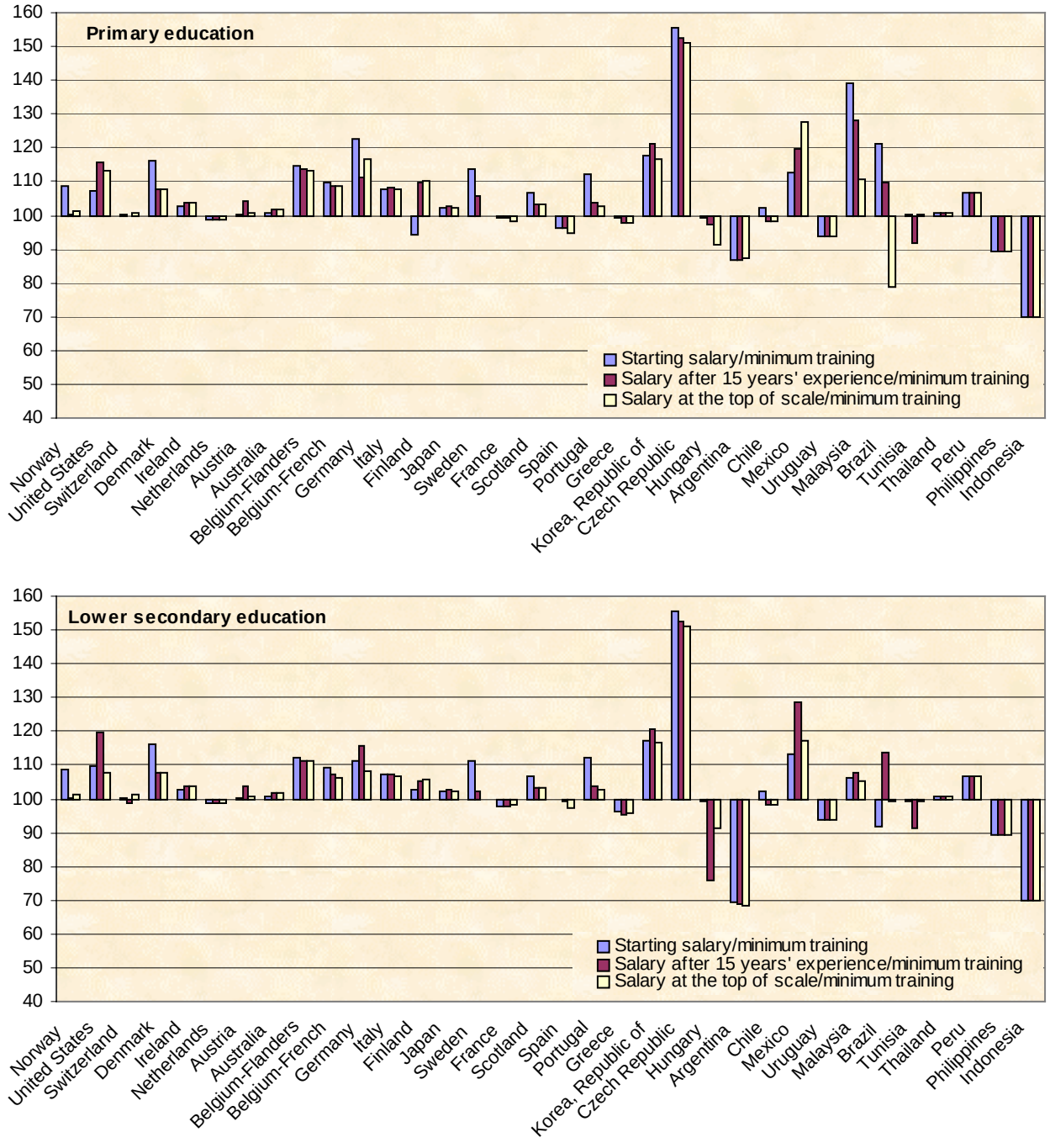
Figure 6: Real salary index for teachers (language and mathematics) in selected countries (1990-1998 or latest year available) (1990=100)





Source: ILO, 2000.

Figure 7: Index of change in teachers' salaries (1998 and 20010 converted to 2001 price levels using GDP deflators (1998=100)



Source: OECD, 2003 and OECD/UNESCO database.
Year of reference 2000 for Malaysia and Peru.
Note: Countries are ranked in descending order of GDP per capita.

Among other things, from these data it can be seen that teachers' salaries are influenced by both policy measures and external economic and historical factors, on which policy maker have very little influence. If the issue is extremely complex and there is no easy solution to it, particular attention must be paid to monitoring current conditions and their evolution over time as well as to learning from strategies and good practices adopted by individual countries to manage teachers' costs without reducing teachers' salaries.

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Data for Figures 1 and 2. Annual statutory salaries of teachers in public institutions at starting, after 15 years of experience and at the top of the scale by level of education, in equivalent US dollars converted using PPPs (2001).

	Primary education			Lower secondary education			Upper secondary education, general programmes			
	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	Years from starting to top salary (lower secondary education)
Argentina	8 181	11 362	13 568	10 617	15 249	18 454	10 617	15 249	18 454	21-24
Australia	27 980	39 715	39 715	28 025	39 668	39 668	28 024	39 668	39 668	10
Austria	23 384	31 124	46 833	24 251	33 187	50 428	24 742	34 516	52 692	34
Belgium (Fl.)	24 618	33 047	39 127	24 618	34 475	42 028	30 544	44 085	52 990	27
Belgium (Fr.)	23 430	31 984	38 380	23 865	33 684	41 264	29 741	43 328	52 263	27
Brazil	7 922	10 695	11 628	14 900	17 263	18 800	16 701	17 777	20 326	25
Chile	11 631	12 902	17 310	11 631	12 902	17 310	11 631	13 487	18 107	30
China [1]	2 835	2 952	3 595	2 835	2 952	3 595	2 835	2 952	3 595	m
Czech Republic	10 704	13 941	18 429	10 704	13 941	18 429	12 200	15 520	21 045	32
Denmark	31 165	35 297	35 297	31 165	35 297	35 297	30 103	40 019	42 734	8
Egypt	2 222	4 961	m	2 222	4 961	m	2 222	4 961	m	m
England	23 297	36 864	36 864	23 297	36 864	36 864	23 297	36 864	36 864	8
Finland	19 835	27 175	28 075	22 320	30 945	32 429	23 104	32 429	34 314	20
France	21 702	29 193	43 073	24 016	31 507	45 501	24 016	31 507	45 501	34
Germany	38 412	46 459	49 839	39 853	49 053	51 210	43 100	52 839	55 210	28
Greece	20 422	24 716	29 798	20 422	24 716	29 798	20 422	24 716	29 798	33
Hungary	6 340	8 957	12 200	6 340	8 957	12 200	7 704	11 260	14 809	40
Iceland	16 883	18 717	19 373	16 883	18 717	19 373	23 282	29 546	32 306	18
India [1 4]	10 678	15 236	16 375	12 992	19 373	21 074	15 798	23 205	24 914	20
Indonesia	1 172	1 855	3 535	1 172	1 855	3 535	1 219	2 234	3 535	32
Ireland	22 727	36 837	41 580	23 861	37 234	41 977	23 861	37 234	41 977	22
Italy	23 537	28 483	34 339	25 400	31 072	37 798	25 400	31 959	39 561	35
Jamaica	7 345	8 751	8 751	7 345	8 751	8 751	7 345	8 751	8 751	12
Japan	22 800	43 043	54 921	22 800	43 043	54 921	22 800	43 069	56 580	31
Jordan [1]	7 838	10 200	26 475	7 838	10 200	26 475	7 838	10 200	26 475	43
Korea	25 177	42 845	68 581	25 045	42 713	68 449	25 045	42 713	68 449	37
Malaysia [1]	9 344	14 280	17 650	13 647	21 936	29 513	13 647	21 936	29 513	22
Mexico	11 703	15 455	25 565	14 993	19 588	32 240	m	m	m	14
Netherlands	27 464	32 750	39 645	28 498	35 055	43 552	28 773	48 889	57 808	22
New Zealand	17 544	33 941	33 941	17 544	33 941	33 941	17 544	33 941	33 941	7
Norway	28 942	32 621	35 502	28 942	32 621	35 502	28 942	32 621	35 502	28
Paraguay	9 146	9 146	9 146	14 266	14 266	14 266	14 266	14 266	14 266	a
Peru [1]	5 597	5 597	5 597	5 536	5 536	5 536	5 536	5 536	5 536	22
Philippines	10 777	11 896	12 811	10 777	11 896	12 811	10 777	11 896	12 811	22
Portugal	19 585	28 974	52 199	19 585	28 974	52 199	19 585	28 974	52 199	26
Russian Federation [1]	3 735	3 735	3 735	3 735	3 735	3 735	3 735	3 735	3 735	m
Scotland	22 388	35 872	35 872	22 388	35 872	35 872	22 388	35 872	35 872	11
Slovakia	5 319	6 604	7 581	5 319	6 604	8 377	5 319	6 604	9 267	27
Spain	26 875	31 357	39 123	30 228	35 215	43 790	31 345	36 500	45 345	39
Sweden	21 498	25 722	28 489	21 498	25 722	28 489	23 070	27 535	29 653	a
Switzerland	35 059	46 048	54 900	41 358	54 852	64 707	49 484	63 893	74 949	24
Thailand	6 057	14 886	28 390	6 057	14 886	28 390	6 057	14 886	28 390	37
Tunisia [2]	13 418	13 564	15 409	17 073	17 236	19 500	20 782	20 977	23 482	30
Turkey	10 014	12 031	17 325	a	a	a	9 162	11 180	16 473	27
United States	28 681	41 595	50 636	28 693	41 595	49 728	28 806	41 708	49 862	m
Uruguay [3]	5 734	6 872	8 295	5 734	6 872	8 295	6 240	7 378	8 801	24
OECD Country mean	***21 982***	***30 047***	***36 455***	***23 283***	***31 968***	***38 787***	***24 350***	***34 250***	***41 344***	***25***

1. Year of reference 2000.
2. Including additional bonuses.
3. Salaries for a position of 20 hours per week. Most teachers hold two positions.4.
4. Salaries in National Capital Territory of Delhi. Teachers- salaries vary from state to state.
Source: OECD, 2003 and OECD, 2002.

Data for Figures 3.
Salary per hour of net contact (teaching) time after 15 years of experience by level of education, in equivalent US dollars converted using PPPs (2001).

	Primary education	Lower secondary education	Upper secondary education, general programmes
Argentina	16	19	21
Chile	16	16	16
Egypt	8	8	8
India [1 2]	16	19	22
Indonesia	1	3	3
Jamaica	9	9	9
Jordan [1]	13	13	15
Malaysia [1]	16	29	29
Paraguay	11	16	14
Peru [1]	9	m	10
Philippines	10	10	12
Thailand	20	23	23
OECD country mean	**37**	**45**	**52**

1. Year of reference 2000.
2. Salaries are those in the National Capital Territory of Delhi. Teachers' salaries vary from state to state.
Source: OECD, 2003 and OECD, 2002.

Data for Figure 4. Ratio of salary after 15 years of experience to GDP per capita (2001).

	Primary education	Lower secondary education	Upper secondary education, general programmes
Argentina	0.92	1.23	1.23
Australia	1.45	1.44	1.44
Austria	1.09	1.16	1.21
Belgium (Fl.)	1.23	1.29	1.65
Belgium (Fr.)	1.19	1.26	1.62
Brazil	1.45	2.35	2.42
Chile	1.37	1.37	1.43
China [1]	0.88	0.88	0.88
Czech Republic	0.97	0.97	1.08
Denmark	1.17	1.17	1.33
Egypt	1.37	1.37	1.37
England	1.46	1.46	1.46
Finland	1.03	1.17	1.23
France	1.14	1.23	1.23
Germany	1.75	1.84	1.99
Greece	1.46	1.46	1.46
Hungary	0.69	0.69	0.87
Iceland	0.64	0.64	1.02
India [1 4]	7.22	9.18	11.00
Indonesia	0.61	0.61	0.73
Ireland	1.23	1.24	1.24
Italy	1.07	1.17	1.20
Jamaica	2.38	2.38	2.38
Japan	1.63	1.63	1.63
Jordan [1]	2.66	2.66	2.66
Korea	2.69	2.69	2.69
Malaysia [1]	1.59	2.49	2.49
Mexico	1.69	2.14	m
Netherlands	1.14	1.22	1.70
New Zealand	1.61	1.61	1.61
Norway	0.88	0.88	0.88
Paraguay	2.07	3.22	3.22
Peru [1]	1.22	1.20	1.20
Philippines	3.06	3.06	3.06
Portugal	1.56	1.56	1.56
Russian Federation [1]	0.54	0.54	0.54
Scotland	1.42	1.42	1.42
Slovakia	0.55	0.55	0.55
Spain	1.50	1.68	1.74
Sweden	1.01	1.01	1.08
Switzerland	1.52	1.81	2.11
Thailand	2.49	2.49	2.49
Tunisia [2]	2.14	2.72	3.31
Turkey	2.12	a	1.97
United States	1.19	1.19	1.19
Uruguay [3]	0.76	0.76	0.82

1. Year of reference 2000.
2. Including additional bonuses.
3. Salaries for a position of 20 hours per week. Most teachers hold two positions.4.
4. Salaries in National Capital Territory of Delhi. Teachers- salaries vary from state to state.
Source: OECD, 2003 and OECD, 2002.

Data for Figure 5. GDP per capita and annual statutory salary after 15 years of experience in primary education (2001).

	GDP per capita	Salary after 15 years of experience
Argentina	12 377	11 362
Brazil	7 391	10 695
Chile	9 417	12 902
Egypt	3 634	4 961
Indonesia	3 043	1 855
Jamaica	3 677	8 751
Malaysia [1]	8 981	14 280
Paraguay	4 426	9 146
Peru [1]	4 582	5 597
Philippines	3 890	11 896
Thailand	5 978	14 886
Tunisia [1 2]	6 367	13 564
Uruguay [3]	9 035	6 872

1. Year of reference 2000.
2. Including additional bonuses.
3. Salaries for a position of 20 hours per week. Most teachers hold two positions.
Source: OECD, 2003; OECD, 2002; OECD/UNESCO database.

Data for Figure 6. Real salary index for teachers (language and mathematics) in selected countries (1990-1998 or latest year available) (1990=100).

Primary education		
High-income countries	Austria	101.5
	Bermuda	144.4
	Cyprus	111.9
	Finland	92
	Italy	95.4
	Japan	118.7
Upper middle-income countries	Bahrain	98.1
	Barbados	88.1
	Korea Rep. of	156.5
Lower middle-income countries	Belize	117.1
	El Salvador	120.1
	Thailand	147.3
Low-income countries	Central African Rep.	74.7
	Honduras	121.1
	Myanmar	26.8
	Zambia	60.1

Source: ILO, 2000.

Secondary education		
High-income countries	Bermuda	128.8
	Cyprus	109.3
	Finland	100.4
	Italy	95.6
	Singapore	164.4
Upper middle-income countries	Barbados	88.1
	Bahrain	98.1
	Korea Rep. of	156.5
	Mauritius	183.80
	Venezuela	65
Lower middle-income countries	Belize	86.9
	El Salvador	117.7
	Philippines	104.6
	Thailand	137.9
Low-income countries	Central African Rep.	62.5
	Tchad	85.2
	Honduras	59.2
	Myanmar	26.4

Source: ILO, 2000.

Data for figure 7. Reference statistics used in the calculation of the index of change in teachers' salaries (1998, 2001).

Teachers' salaries in national currency (1998)									
	Primary education			Lower secondary education			Upper secondary education, general programmes		
	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training
OECD countries									
Australia	33 705	47 305	47 305	33 705	47 305	47 305	33 705	m	m
Austria	281 054	358 698	560 526	291 659	384 604	602 695	309 692	413 941	678 567
Belgium-Flanders	764 297	1 035 979	1 230 113	781 559	1 103 633	1 344 827	957 591	1 410 501	1 694 848
Belgium-French	761 689	1 046 190	1 256 891	780 472	1 119 617	1 381 402	983 412	1 452 713	1 761 342
Czech Republic	89 122	118 475	158 236	89 122	118 475	158 236	98 790	131 225	175 581
Denmark	212 000	259 000	259 000	212 000	259 000	259 000	232 400	342 000	342 000
England	14 606	22 234	33 040	14 780	24 792	33 932	14 780	24 792	33 932
Finland	119 352	140 592	144 638	123 397	166 890	173 970	m	173 970	185 096
France	130 782	176 606	262 716	147 059	192 883	278 088	147 059	192 883	278 088
Germany	57 430	76 439	78 249	65 677	77 445	86 497	70 505	86 798	96 052
Greece	4 403 000	5 411 000	6 513 500	4 538 100	5 558 000	6 660 500	4 538 100	5 558 000	6 660 500
Hungary	538 811	775 424	1 129 011	538 811	997 425	1 129 011	679 211	997 425	1 285 804
Ireland	15 205	24 482	27 601	15 949	24 742	27 861	15 949	24 742	27 861
Italy	31 263 917	37 734 667	45 769 750	33 939 304	41 440 304	50 723 387	33 939 304	41 440 304	53 245 387
Japan	3 576 000	6 728 000	8 633 000	3 576 000	6 728 000	8 633 000	3 576 000	6 732 000	8 894 000
Korea, Republic of	15 649 000	25 868 000	42 941 000	15 649 000	25 868 000	42 941 000	15 649 000	25 868 000	42 941 000
Mexico	47 422	58 831	91 416	60 360	69 498	125 202	m	m	m
Netherlands	50 690	60 450	73 160	52 590	64 680	80 360	53 100	90 320	107 090
New Zealand	29 000	47 100	47 100	29 000	47 100	47 100	29 000	47 100	47 100
Norway	177 893	217 123	233 699	177 893	217 123	233 699	195 472	235 285	253 858
Portugal	2 031 500	3 250 600	5 932 200	2 031 500	3 250 600	5 932 200	2 031 500	3 250 600	5 932 200
Scotland	12 822	21 315	21 315	12 822	21 315	21 315	12 822	21 315	21 315
Spain	3 161 991	3 695 294	4 680 553	3 435 043	4 014 295	5 095 944	3 689 959	4 314 293	5 501 542
Sweden	173 000	222 000	m	177 000	230 000	m	193 000	248 000	m
Switzerland	65 089	85 853	101 493	76 647	103 207	118 826	91 818	121 601	138 310
United States	25 165	33 973	42 185	24 624	32 713	43 458	24 869	35 455	43 457
non-OECD countries									
Argentina	5 958	8 280	9 832	9 651	13 984	16 990	9 651	13 984	16 990
Brazil	4 310	6 433	9 731	10 708	10 001	12 483	11 271	14 406	16 600
Chile	2 535 612	2 929 860	3 927 408	2 535 612	2 929 860	3 927 408	2 535 612	2 974 788	3 920 928
Indonesia	2 362 800	3 739 200	7 125 600	2 362 800	3 739 200	7 125 600	2 457 600	4 502 400	7 125 600
Malaysia	10 284	17 076	24 420	19 680	31 116	43 044	19 680	31 116	43 044
Peru	7 265	7 265	7 265	7 186	7 186	7 186	7 186	7 186	7 186
Philippines	103 260	113 988	122 748	103 260	113 988	122 748	103 260	113 988	122 748
Thailand	76 320	187 560	357 720	76 320	187 560	357 720	76 320	187 560	357 720
Tunisia	5 400	5 940	6 204	6 948	7 596	7 920	8 412	9 120	9 492
Uruguay	43 081	51 633	62 324	43 081	51 633	62 324	46 882	55 433	66 124

Source: OECD/UNESCO database.

Data for figure 7 (continued). Reference statistics used in the calculation of the index of change in teachers' salaries (1998, 2001).

	Teachers' salaries in national currency (2001)									
	Primary education			Lower secondary education			Upper secondary education, general programmes			
	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	Starting salary/ minimum training	Salary after 15 years of experience /minimum training	Salary at top of scale /minimum training	GDP deflator (1998=100)
OECD countries										
Australia	37 135	52 709	52 709	37 195	52 648	52 648	37 194	52 648	52 648	110
Austria	293 364	390 454	587 532	304 238	416 334	632 629	310 398	433 010	661 035	104
Belgium-Flanders	916 528	1 230 325	1 456 670	916 528	1 283 477	1 564 691	1 137 153	1 641 278	1 972 790	104
Belgium-French	872 308	1 190 743	1 428 867	888 505	1 254 061	1 536 231	1 107 248	1 613 095	1 945 737	104
Czech Republic	153 341	199 718	264 009	153 341	199 718	264 009	174 778	222 333	301 485	111
Denmark	264 000	299 000	299 000	264 000	299 000	299 000	255 000	339 000	362 000	107
England	15 141	23 958	23 958	15 141	23 958	23 958	15 141	23 958	23 958	106
Finland	118 900	162 900	168 300	133 800	185 500	194 400	138 500	194 400	205 700	106
France	134 432	180 835	266 817	148 766	195 169	281 857	148 766	195 169	281 857	103
Germany	71 390	86 346	92 628	74 067	91 167	95 175	80 103	98 202	102 609	102
Greece	4 818 952	5 832 446	7 031 622	4 818 952	5 832 446	7 031 622	4 818 952	5 832 446	7 031 622	110
Hungary	691 692	977 280	1 331 064	691 692	977 280	1 331 064	840 552	1 228 536	1 615 776	129
Ireland	17 796	28 844	32 558	18 684	29 155	32 869	18 684	29 155	32 869	114
Italy	35 923 289	43 472 039	52 411 123	38 767 304	47 424 304	57 689 387	38 767 304	48 777 387	60 380 387	107
Japan	3 478 000	6 566 000	8 378 000	3 478 000	6 566 000	8 378 000	3 478 000	6 570 000	8 631 000	95
Korea, Republic of	18 302 750	31 146 750	49 855 800	18 206 750	31 050 750	49 759 800	18 206 750	31 050 750	49 759 800	99
Mexico	73 336	96 846	160 197	93 954	122 746	202 027	m	m	m	137
Netherlands	55 754	66 485	80 482	57 853	71 163	88 413	58 411	99 248	117 353	111
New Zealand	26 000	50 300	50 300	26 000	50 300	50 300	26 000	50 300	50 300	108
Norway	243 100	274 000	298 200	243 100	274 000	298 200	243 100	274 000	298 200	126
Portugal	2 542 400	3 761 200	6 776 100	2 542 400	3 761 200	6 776 100	2 542 400	3 761 200	6 776 100	111
Scotland	14 550	23 313	23 313	14 550	23 313	23 313	14 550	23 313	23 313	106
Spain	3 371 421	3 933 670	4 907 865	3 791 978	4 417 574	5 493 269	3 932 164	4 578 875	5 688 403	111
Sweden	205 100	245 400	271 800	205 100	245 400	271 800	220 100	262 700	282 900	104
Switzerland	66 597	87 470	104 286	78 562	104 195	122 914	93 998	121 368	142 369	102
United States	28 681	41 595	50 636	28 693	41 595	49 728	28 806	41 708	49 862	106
non-OECD countries										
Argentina	5 072	7 044	8 412	6 582	9 454	11 441	6 582	9 454	11 441	98
Brazil	6 337	8 556	9 302	11 920	13 810	15 040	13 360	14 222	16 261	121
Chile	3 067 200	3 402 444	4 564 872	3 067 200	3 402 444	4 564 872	3 067 200	3 556 677	4 775 112	118
Indonesia	2 362 800	3 739 200	7 125 600	2 362 800	3 739 200	7 125 600	2 457 600	4 502 400	7 125 600	143
Malaysia [1]	15 044	22 991	28 416	21 972	35 317	47 516	21 972	35 317	47 516	105
Peru [1]	8 339	8 339	8 339	8 248	8 248	8 248	8 248	8 248	8 248	108
Philippines	113 592	125 388	135 024	113 592	125 388	135 024	113 592	125 388	135 024	123
Thailand	76 320	187 560	357 720	76 320	187 560	357 720	76 320	187 560	357 720	99
Tunisia	5 904	5 968	6 780	7 512	7 584	8 580	9 144	9 230	10 332	109
Uruguay	46 158	55 321	66 776	46 158	55 321	66 776	50 231	59 393	70 848	114

1. Year of reference 2000.

Source: OECD, 2003 and OECD/UNESCO database.

Data for figure 7 (continued). Index of change between 1998 and 2001 in tachers' salaries at starting salary, after 15 years of experience and at the top of the scale, by level of education, converted to 2001 price levels using GDP deflators (1998=100).

	Primary education			Lower secondary education			Upper secondary education, general programmes			
	Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	Starting salary / minimum training	Salary after 15 years of experience / minimum training	Salary at top of scale / minimum training	GDP per capita 2001
OECD countries										
Australia	101	102	102	101	102	102	101	m	m	27 474
Austria	100	104	101	100	104	101	96	100	93	28 626
Belgium-Flanders	115	114	113	112	111	111	114	111	111	26 782
Belgium-French	110	109	109	109	107	106	108	106	106	26 782
Czech Republic	156	152	151	156	152	151	160	153	155	14 433
Denmark	116	108	108	116	108	108	103	93	99	30 082
England	98	102	68	97	91	67	97	91	67	25 294
Finland	94	110	110	103	105	106	m	106	105	26 434
France	100	99	98	98	98	98	98	98	98	25 538
Germany	122	111	117	111	116	108	112	111	105	26 587
Greece	99	98	98	96	95	96	96	95	96	16 887
Hungary	99	97	91	99	76	91	96	95	97	12 922
Ireland	103	104	104	103	104	104	103	104	104	30 052
Italy	108	108	108	107	107	107	107	110	106	26 587
Japan	102	103	102	102	103	102	102	103	102	26 410
Korea, Republic of	118	121	117	117	121	117	117	121	117	15 901
Mexico	112	120	127	113	128	117	m	m	m	9 141
Netherlands	99	99	99	99	99	99	99	99	99	28 685
New Zealand	83	99	99	83	99	99	83	99	99	21 119
Norway	108	100	101	108	100	101	99	92	93	37 008
Portugal	112	104	103	112	104	103	112	104	103	18 589
Scotland	107	103	103	107	103	103	107	103	103	25 294
Spain	96	96	95	100	99	97	96	96	93	20 928
Sweden	114	106	m	111	102	m	109	101	m	25 551
Switzerland	100	100	101	100	99	101	100	98	101	30 266
United States	107	115	113	110	120	108	109	111	108	35 045
non-OECD countries										
Argentina	87	87	87	70	69	69	70	69	69	12 377
Brazil	121	110	79	92	114	99	98	81	81	7 391
Chile	102	98	98	102	98	98	102	101	103	9 417
Indonesia	70	70	70	70	70	70	70	70	70	3 043
Malaysia	139	128	111	106	108	105	106	108	105	8 981
Peru	107	107	107	107	107	107	107	107	107	4 582
Philippines	89	89	89	89	89	89	89	89	89	3 890
Thailand	101	101	101	101	101	101	101	101	101	5 978
Tunisia	100	92	100	99	91	99	100	93	100	6 367
Uruguay	94	94	94	94	94	94	94	94	94	9 035

The index is calculated as teacher salary 2001 in national currency * 100 / teacher salary 1998 in national currency * GDP deflator 2001 (1998=100).
Source: OECD 2003 and OECD/UNESCO-UIS database.