Chapter 5

Korea

Macro dimension

Impact of the economic crisis on Korea

As an export-oriented country with an open capital account, Korea has been severely hit by the global financial crisis. The decline in exports was particularly sharp given Korea's concentration on medium and high-technology products, which are very cyclically sensitive. Korea's GDP decreased by 17% (at an annual rate) in the fourth quarter of 2008, more than double the average drop of GDP in OECD member countries (OECD, 2010a: 22). However, it should be mentioned that the Korean economy was already slowing prior to the intensification of the global financial crisis in September 2008, reflecting the US recession that had begun in December 2007, rising oil prices and the impact of tighter monetary policy.

The drastic economic downturn was accompanied by large outflows of foreign capital. As a consequence, Korean firms turned toward the domestic banking sector. However, domestic banks themselves faced financial troubles as they had accumulated large external debts in the years prior to the crisis and found it difficult to roll over these loans given the global liquidity crunch. These adverse developments put downward pressure on the Korean won. By the first quarter of 2009, the won was 31% below its level a year earlier, the second largest drop in the OECD after Iceland (OECD, 2010a: 22). The rapid decline of the won in 2008 brought back memories of the 1997 crisis, although the underlying causes of the two crises were very different. While the 1997 crisis was triggered by the collapse of the internal financial market, the 2008 crisis was mainly caused by external factors.

Yet, the depreciation of the won also helped the Korean economy rebound. Combined with high growth rates in China, which receives almost one-third of Korean exports, it gave rise to a strong export-led recovery. Korea went up from being the world's 12th largest exporter in 2008 to the 9th largest in 2009 (OECD, 2010a: 11). By the second quarter of 2009, GDP growth in Korea already averaged 3% (ILO, 2010). Despite positive growth rates, the labour market situation had not improved. After reaching a peak of 3.9% in May 2009, the unemployment rate decreased slightly, only to jump up again to 4.8% in January 2010 (ILO, 2010).

Stimulus measures

Export-led recovery was helped by a timely and comprehensive policy response. To stabilise financial markets and alleviate the credit crunch, Korea's central bank provided KRW 28 trillion of liquidity, about 2.7% of GDP. It also lowered its policy rate from 5.25% in 2008 to a record low of 2% by February 2009. Additional liquidity was provided by a KRW 10 trillion Market Stabilisation Fund that was financed by the Korean Government and other public organisations (OECD, 2010a: 72-75).

Besides financial market stabilisation measures, the Korean Government also implemented measures to stimulate the real economy. Over the period 2008-10, stimulus measures amounted to 6.1% of 2008 GDP (around KRW 62 trillion), which is the largest package among the 26 OECD member countries adopting explicit crisis-driven stimulus programmes. Additional expenditure was included in a September 2008 supplementary budget and in the 2009 budget, along with temporary tax cuts. Another supplementary budget followed in April 2009, while personal and corporate income tax rates were permanently cut in 2009-10.

The stimulus is almost evenly divided between **additional expenditure** (3.2% of GDP) and **tax cuts** (2.8%):

- On the **expenditure** side, the first spending category was public investment (1.2% of GDP and 36.1% of the total stimulus package, i.e. KRW 10.1 trillion out of KRW 28.0 trillion). Public investment targeted mostly transport and energy. Public investment has been driven in part by the "Green New Deal Policy" announced in January 2009, which included major infrastructure projects such as the Four Major Rivers Restoration Project and railroad construction that boosted short-term public employment. A second major spending category was transfers to businesses (1% of GDP), particularly SMEs. The remaining expenditures was divided into transfers to households (0.7% of GDP), transfers to sub-national governments (0.3% of GDP) and miscellaneous other measures (0.1% of GDP).
- On the **tax** side, about half of the cuts were targeted on households (1.4% of GDP). Most of the tax reductions were temporary measures for low-income households and cuts in housing-related taxes. Tax cuts for businesses (1% of GDP) were aimed at boosting corporate investment and R&D. Finally, consumption taxes were lowered, including those on cars, thus helping to boost car sales in Korea by 20% in 2009. In addition to these temporary measures, there were permanent cuts in income tax rates.[1]
- Generally, the policy responses have been appraised as very successful in stabilising financial markets and stimulating the real economy. The timeliness and efficiency in responding to the crisis was partly due to the experience gained in the 1997 crisis. In the wake of the Asian financial crisis, Korea had created a number of institutions to guarantee the transparency and stability of financial markets. These institutions, most notably the Financial Supervisory Commission and the Bank of Korea, whose independence had been enhanced, proved to be very helpful in dealing with the current financial turbulences. The fiscal response was also particularly important in sustaining employment. It is estimated that the unemployment rate during 2009 would have been 4.3% – rather than the 3.6% recorded – without the additional public jobs. Employment gains boosted wage income and helped to sustain private consumption growth, which was the highest in the OECD area during 2009.

Budget deficits

As a result of falling revenues and additional expenditure, the consolidated central government budget (excluding the social security surplus) widened from 3.3% in 2008 to 4.1% in 2009. With the recovery on track, government spending has been reduced in 2010, and the government plans to bring fiscal deficit to close to zero by 2013 (OECD, 2010).

Korea's gross government debt amounted to 32% of GDP in 2008 and increased slightly to 35% in 2009. While well below the OECD average of 79% in 2009, it represented a significant increase compared to Korean debt-to-GDP ratio before the Asian financial crisis in 1996, which amounted to 10% (OECD, 2010a: 53).

Table 5.1.Fiscal stimulus in Korea

Announced or implemented over the period 2008-10 as a share of 2008 GDP

Spending measures	% of 2008 GDP	Tax cuts	% of 2008 GDP
Total[1]	3.2	Total	2.8
Public investment	1.2	For individuals	1.4
Transport	0.4	Targeted on low-income groups	0.6
Energy	0.2	Increased personal tax allowance	0.1
Other[2]	0.6	Oil tax rebate	0.5
		Reductions in housing-related taxes	0.4
		Personal income tax cut	0.3
Transfers to households	0.7	For businesses	1.1
Pensions	0.3	Tax relief associated with new spending	0.4
Unemployment benefits	0.2	R&D	0.1
Lengthening benefit duration	0.1	Investment	0.3
Loosening eligibility criteria	0.2	Corporate income tax cut	0.7
Other income-related transfers	0.1		
Transfers to businesses	1.0	On consumption	0.2
Small and medium-sized enterprises	0.4	Cuts in general consumption taxes	0.1
For public financial institutions	0.3	Cuts in car-related taxes	0.1
To job-creating companies	0.2		
Construction and transport sectors	0.1		
Other	0.1	Other	0.2
Transfers to sub-national governments	0.3		

1. The government increased spending in FY2008 through a supplementary budget of KRW 4.6 trillion passed in September 2008. For FY2009, spending was boosted by KRW 11.4 trillion in December 2008 and by a supplementary budget of KRW 17.2 trillion that was passed in April 2009.

2. Includes 0.1% of GDP each for agriculture, education, public services, environmental protection, defence, and housing and health.

Source: OECD (2010) *OECD Economic Surveys: Korea 2010*, OECD Publishing, Paris, doi: 10.1787/eco_surveys-kor-2010-en.

Exit strategy

A large number of tax cuts and benefits were to be withdrawn in 2010. These measures helped Korea to limit its current gross government debt of 35% of GDP to less than 40% in 2010, well below the OECD average of 96%. Given Korea’s aging population and the strain this will place on public finances in the upcoming years, fiscal consolidation has become a priority for the Korean Government. The government scaled back fiscal stimulus in the 2010 budget by cutting spending by 4.2% relative to 2009 (including the supplementary budget). To reduce spending, the government eliminated some of the projects funded by the stimulus packages that appeared to be less effective. The largest cut by spending category in 2010 was a 30.8% fall in industry, SMEs and energy where much of the fiscal stimulus had been concentrated. Significant spending reductions are also planned for the environment (5.3%), general public administration (4.1%) and education (3.6%). This will be partially offset by a 7.1% rise in R&D spending, in line with Korea’s 2008 mid-term plan to boost public R&D by 50% between 2008 and 2012. The investment will be concentrated in basic science, new growth engines and green technologies, i.e. key levers for long-term growth.

Design of the public investment scheme

Key Korean public investment priorities

Public investments accounted for approximately 36% of the stimulus measures introduced between 2008 and 2010. Around 0.4% of GDP was targeted at transport networks. Investments in energy infrastructure received support amounting to 0.2% of GDP and the remaining 0.6% was distributed across projects in the areas of agriculture, education, public services, environmental protection, housing, health and defence (around 0.1% for each) (OECD, 2010a: 51; 2010b). Funding focused on metropolitan regions and cross-border regions (OECD, 2010b).

These investments were partly driven by the "Green New Deal Policy" announced in January 2009 as a response to the economic downturn in the short term by creating jobs while also strengthening the foundations for green growth in the medium to long term. The "Green New Deal Policy" represented a consolidation of previous plans with increased expenditures woven in to counter the crisis. The "Green New Deal Policy" was later absorbed and expanded by a Five-Year Green Growth Plan, which was released in July 2009 with a total funding of KRW 107.4 trillion (USD 89.5 billion). The plan calls for spending 2% of GDP each year over the 2009-13 period across 600 green growth projects, to be completely financed by the central government (except for KRW 8.5 trillion by two public enterprises). Two of the ten spending categories, which are mainly focused on public construction, account for more than half of total expenditures: "Strengthening the capacity to adapt to climate change" and "Greening the land and water and building the green transport infrastructure" (OECD, 2010a: 142). Projects foreseen in the first category include the expansion of Korea's high-speed train system as part of the government's plan to boost the share of passenger transport by rail from 18% in 2009 to 26% in 2020. The second category includes the "Four Major Rivers Restoration Project", which promotes the construction of special dams and the heightening of agricultural reservoir banks.

The October 2009 mid-term fiscal plan incorporated the expenditures contained in the Five-Year Green Growth Plan announced in July. Nevertheless, the total amount of spending for the years 2011-12 did not increase compared to the 2008 mid-term fiscal plan – possibly because outlays in some non-green growth categories may have been cut and/or some previously planned expenditures may have been re-categorised as green growth.

Involvement of sub-national governments

Around 75.2% of the investment package is targeted at sub-national governments (KRW 7.6 trillion out of KRW 10.1 trillion).

Co-funding (matching) of the investments was based on the fiscal capacities of sub-national governments (OECD, 2010b). The conditions for matching grants have been relaxed. For example, matching rates required from sub-national governments were lowered and the evaluation of co-funding capabilities was loosened.

In addition, sub-national governments received transfers from the central government amounting to 0.3% of GDP.

Table 5.2. The Five-Year Plan for Green Growth (2009-13)

Trillions KRW

	Total	2009	2010	2011	2012	2013
Total	107.4	17.4	24.2	25.7	20.6	19.4
Central government budget	98.9	17.4	20.5	21.9	19.6	19.4
Public enterprises' investment	8.5	--	3.7	3.8	1.0	--
Memorandum item: total green technology R&D investment in all categories	(13.0)	(1.9)	(2.2)	(2.5)	(2.8)	(3.5)
A. Adapting to climate change and enhancing energy independence	57.5	8.5	15.5	16.0	9.8	7.7
1. Effective mitigation of greenhouse gas emissions	5.4	1.0	0.9	1.0	1.1	1.3
2. Reduction of the use of fossil fuels and the enhancement of energy independence	15.4	2.8	3.8	2.9	3.0	2.8
3. Strengthening the capacity to adapt to climate change	36.7	4.7	10.9	12.0	5.6	3.6
(Four Major Rivers Restoration Project)	*(15.4)*	*(0.8)*	*(6.4)*	*(7.1)*	*(1.1)*	*(--)*
B. Securing new growth engines	23.5	3.9	4.1	4.7	5.3	5.6
4. Development of green technologies	7.6	1.5	1.4	1.5	1.5	1.6
5. The "greening" of existing industries and promotion of green industries	4.5	0.7	0.9	0.9	1.0	1.0
6. Advancement of industrial structure to increase services	9.7	1.4	1.5	2.0	2.4	2.5
7. Engineering a structural basis for the green economy	1.8	0.3	0.2	0.3	0.4	0.5
C. Improving living standards and enhancing national status	26.4	5.0	4.6	5.1	5.6	6.1
8. Greening the land and water and building the green transport infrastructure	23.9	4.6	4.2	4.6	5.0	5.5
9. Bringing the green revolution to daily lives	1.8	0.3	0.3	0.3	0.4	0.4
10. Becoming a role model for the international community as a green growth leader	0.7	0.1	0.1	0.1	0.1	0.1

1. Actual budgets for 2009-10 and projections for 2011-13.

Source: OECD (2010), *OECD Economic Surveys: Korea 2010*, OECD Publishing, Paris, doi: 10.1787/eco_surveys-kor-2010-en.

Incentives to promote public-private co-operation

Public procurement procedures were simplified. In particular, procedures for approval and disbursements were simplified. The length of the procurement period was shortened from 79-90 days to 20-38 days. There was also an increase in the liquidities offered to the private sector and private investors had the possibility to receive loans at the interest rate of government bonds. The evaluation of the traffic and environmental impact of projects was also accelerated.

Since public-private partnerships (PPPs) were first introduced in Korea by the Promotion of Private Capital into Social Overhead Capital Investment Act in 1994 and the Act on Private Participation in Infrastructure (PPI Act) in 1998 after the 1997 financial crisis, they have been used in projects managed both by the central and local governments (Table 5.3). Major projects conducted through a PPP include, for example, the Seoul Beltway Northern Section, the Incheon International Express Highway and the Busan New Port Phase 1. With the recent decrease in private demand and the sharp increase in the public sector (Figure 5.1), a first round of measures to revitalise PPPs was taken in February 2009 to ease the credit crunch (e.g. the introduction of the Korean Development Bank's Special Loan Programme and the Infrastructure Credit Guarantee Fund), followed by a second round of measures in August 2009 (e.g. strengthened tax incentives and the development of a new risk-sharing scheme in October).

Table 5.3.PPPs and financial subsidies by level of government and type of project

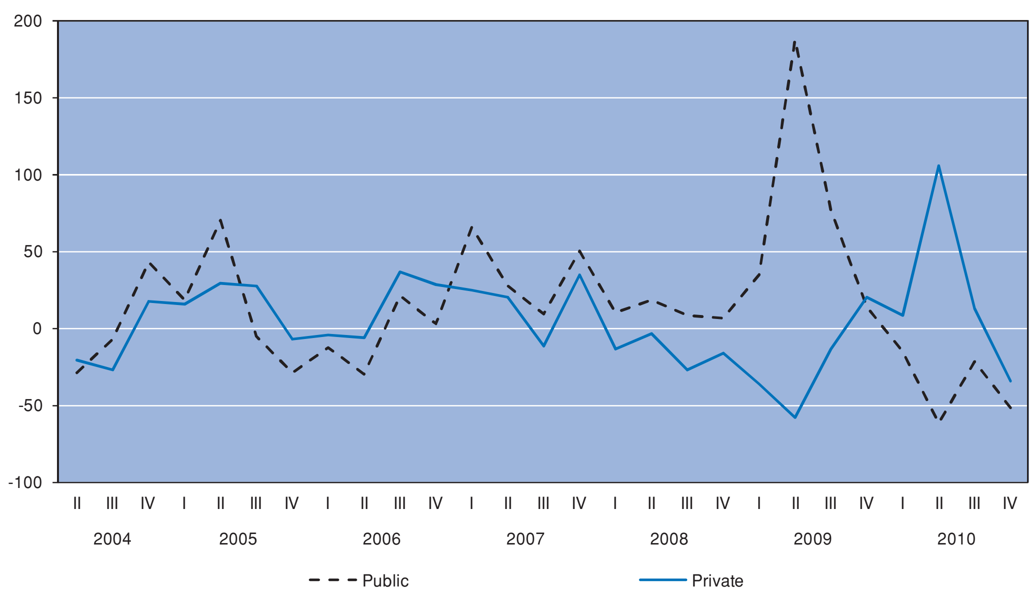
Billions KRW, %

Type		Number of projects	Total project cost (amount)	Total private investment project cost (amount)	Financial subsidy for construction	
					Amount	%
Central government managed projects	Road	34	24 718	19 761	4 957	20
	Railways	11	10 134	6 146	3 988	39
	Seaports	17	4 810	3 720	1 090	23
	Logistics	5	860	849	11	1
	Airports	7	602	602	0	0
	Environment	9	1 369	374	995	73
	Subtotal	83	42 492	31 452	11 040	26
Local government managed projects	Roads	19	2 172	1 783	389	18
	Parking lots	24	205	203	2	1
	Environment	50	1 771	743	1 028	58
	Other	9	804	752	53	7
	Subtotal	102	4 953	3 480	1 472	30

Source: Korea Development Institute (2010), "Global Financial Crisis and Fiscal Implications of PPPs in Korea", Powerpoint presentation, 12 April, *www.oecd.org/dataoecd/40/39/45038031.pdf*.

Figure 5.1. **Number of construction orders received by type of order**

%/year-on-year % change



Source: Korea Development Institute (2010), "Global Financial Crisis and Fiscal Implications of PPPs in Korea", Powerpoint presentation, 12 April, *www.oecd.org/dataoecd/40/39/45038031.pdf*.

Transparency

So far, data on local public finances were made available only to the citizens of each local government, but starting from 2011 the Ministry of Public Administration and Security (MOPAS) is planning to publish a comprehensive set of data every October as part of a strategy to consolidate local public finances and encourage citizen participation.

Implementation of the public investment scheme

Implementation of investment scheme

The plan has focused on the reinforcement of existing investments and on shovel ready investments (Table 5.4), and the total investment funding had been allocated by the end of 2009 (OECD, 2010b). The extensive list of shovel-ready projects includes most notably the Four Major Rivers Restoration project. The government views the project as a solution to rising unemployment, while concerns have been raised that the link between the spending on river management and the development of new sources of growth has yet to be demonstrated other than by creating a limited number of precarious jobs.

Table 5.4. Type of investment selected in priority

		Description
	New types of investments projects	
x	Reinforcement of existing investments	Front loading of fast train construction, urban trains construction
x	Shovel ready investments (e.g. investment projects ready to launch)	Construction of roads, redevelopment of rivers

Source: Response to OECD (2010), "OECD Questionnaire Response, Making the Most of Public Investment Recovery Strategies, Multi-Level Governance Lessons from the Crisis", OECD, Paris.

If funds were not spent during 2009, they were withdrawn by the end of the year. Local governments spent 5.8 percentage points more of their budget than the initial target (KRW 96.3 trillion vs. the target of KRW 91 trillion) in the first half of 2010. The Ministry of Public Administration and Security (MOPAS) carried out a mid-term comparative evaluation of local finance execution between January and March 2010, and announced it would reward the best performing local governments with a total special shared tax of KRW 10 billion (KRW 1 billion each for Gwangju Metropolitan City and the province of Gyeongsangbuk-do, the top spenders).

Public actors in charge of implementing/monitoring at central and sub-central level

The national government, in particular the Ministry of Finance, decided upon investment priorities. The Emergency Economic Response meetings chaired by the President of the Republic started in January 2009 and take place almost every week in the Blue House (the President's office). A series of Crisis Management Response meetings was also inaugurated in August 2008, chaired by the Minister of Finance and aimed at promoting consultation among ministries on the policy response to the crisis. It takes place every week in the Government Complex in Gwacheon. The sub-national governments were responsible for implementing the investment measures.

Main obstacles and co-ordination challenges across levels of government – lessons learned?

Co-ordination challenges across levels of government

Whether the crisis has raised Korea's awareness of long-term economic and fiscal priorities remains to be seen. Speedy response to the crisis has prompted the simplification of *ex ante* evaluation procedures (OECD, 2010b). The central government encouraged local governments to accelerate spending and to issue local bonds during the first half of 2010. However, local debts soared dramatically with the rapid increase of expenditures and the fall in revenues. In particular, social welfare expenditures increased from 9.5% of local government budgets in 2002 to 19% in 2010. The central government has recently asked local governments to reduce their expenditures.

The recovery package was run through a sizeable budget deficit, both for the central government – the main funding authority – and for local governments, which registered a significant loss of revenue and had to rely on subsidies from the central government. Local public finance was severely hit by the crisis.[2] The total balance of local government budgets plunged from a surplus of KRW 20.2 trillion in 2008 to a deficit of KRW 7.1 trillion in 2009. The average fiscal autonomy of local governments decreased from 59.4% in 2000 to 53.6% in 2009 and 52.2% in 2010 (which represents a fall by 17.1% from 1997, the first year when local public finance statistics were available). The capital region registers relatively good fiscal autonomy (over 90% in Seoul Special City, 75.9% in Gyeonggi Province, 74.2% in Incheon Metropolitan City in 2009) compared with other regions (58.3% in Busan Metropolitan City and only between 20-30% in most other provinces). More than half of basic local governments (55.7%) were unable to cover their staff costs with their own revenues in 2010. On 12 July 2010, the municipality of Seongnam (which is located in Gyeonggi Province and had one of the highest levels of fiscal autonomy in the country with 67.4% in 2010) announced that it was unable to repay its debts. Following this announcement, the central government announced the introduction of an "*ex ante* alerting system for local finance crisis" starting from 2011, which will assess local governments in three categories ("normal", "caution needed" and "serious") and will limit the capacity of the local governments in the third category to issue bonds and to launch new large-scale projects.

Regions and municipalities were not involved in the selection of investment priorities (OECD, 2010b). The series of Crisis Management Response meetings started in August 2008 (see above) but it was only on 28 April 2010 that a local government participated for the first time. During the meeting, the province of Chungcheongnam-do reported on its strategy to attract investment and foster regional development and proposed that the central government support the relocation of firms from the capital region to other regions. On the latter matter, the central government answered that no additional support would be provided in 2010 as the allocation of the 2010 budget across regions had been finalised, but it would consider increasing transfers to regions in 2011 to better reflect regional needs. On 3 August 2010, the Ministry of Strategy and Finance (MOSF) held a consultation meeting on local finance with local governments and presented its "10-10 Strategy" to reduce 10% of spending on the least performing projects and apply ten principles to increase the efficiency of spending (including strengthened *ex ante* cost-benefit analysis, strategic financial management, etc.). The Korean Chamber of Commerce (KORCHAM) has conducted a survey in 71 local assemblies and has produced a report that lays out 40 priorities in seven fields, almost 60% of which concern deregulation and improvement of local infrastructure (roads, ports, etc.). It has announced that it will send the report to the Ministry of Strategy and Finance (MOSF); the Ministry of Knowledge and Economy (MKE); the Ministry of Land, Transport and Maritime Affairs (MLTM), etc.

Horizontal co-operation between municipalities was not specifically encouraged by the national government for the implementation of investment measures (OECD, 2010b). However, cross-jurisdictional co-operation is essential to best target the relevant scale for investment.

Lessons learned

Although Korea displayed the fastest economic recovery among OECD member countries, it is not clear to what extent the fiscal package contributed to the recovery. To achieve the goal of front-loading, part of the budget was executed faster than expected. From January to June 2009, an "Emergency Desk for Speedy Budget Execution" was established both in the Ministry of Public Administration and Security (MOPAS) and the Ministry of Strategy and Finance (MOSF). Local governments made daily reports to the desk about the status of emergency expenditure. This has certainly helped to quickly infuse public funds into the private sector, but, in the process, the plans of some projects were not reviewed sufficiently. More information on project assessment and implementation methodology will be collected both at central and local levels.

In the short term, co-ordination among sub-national governments did not stand out as a major challenge as the recovery investment package tended to focus on short-term projects directed by central government ministries. The role of sub-national governments and agencies was therefore limited to complying with the instructions and financial support of the central government. However, the lack of involvement of sub-national governments in the identification of priorities might have limited the potential complementarities across the different types of investments at the local level or the degree to which they targeted local needs well identified in advance.

Whether partial decentralisation or administrative and fiscal federalism constitutes an advantage or not when it comes to providing an emergency response to an economic crisis remains an open question. At least on a nominal scale, the case of Korea suggests that less decentralisation (i.e. tighter control by the central government) contributed to a fast economic recovery. However, it can be argued that other variables are not factored in and the link between tight central government control and fast economic recovery in Korea cannot be stretched too far.

More broadly, the crisis has led to rethinking the role of the public sector in building a healthier economy and strategies for fiscal consolidation. This issue is not being discussed explicitly yet, partly because the government has not announced that "the crisis is over". Once exit strategies will be discussed openly, the issue is likely to be examined, particularly in respect to fiscal reforms (re-allocation of financial responsibility, changes in equalisation policy, grants reforms, fiscal discipline measures, etc.), the reorganisation of sub-national public service delivery (e.g. mergers of sub-national authorities), and reforms linked to local public employment and local civil service (e.g. status, remuneration, staff increases or decreases, etc.).

Notes

1. *i)* The three lower personal income tax rates were reduced in 2009-10 by 2 percentage points from a range of 8-26% to 6-24%. The cut in the top rate of 35% was delayed until 2012; *ii)* the corporate income tax rate (national and local) was cut from 25% to 22% in 2009, pushing it well below the OECD average of 28%. The planned reduction to 20% was delayed until 2012; *iii)* the corporate income tax rate for SMEs was reduced from 11% in 2008 to 10% in 2010.
2. The following data come from the Ministry of Public Administration and Security (MOPAS) and the Parliament's Budget Office.

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