CHAPTER 5. FINANCIAL SECTOR REFORM: MOBILIZING FINANCE FOR INVESTMENT

5.1 ***Turkey's financial sector is repositioning itself to better facilitate growth of the private sector.*** The financial sector's development was impeded by past macroeconomic instability and fiscal deficits, crowding out credit generation to the private sector. As a result, the sector today is smaller than its potential size and performing below its potential in terms of prudently allocating credit in the economy. Increasing credit to the private sector will not only facilitate capital accumulation, leading to growth and better labor productivity, but it will also improve the allocation of capital leading to TFP growth. This chapter provides an assessment of strengths and weaknesses in Turkey's financial sector and lays out the main reform challenges during EU accession in order to facilitate sound financial sector development and maximize its impact on growth.

5.2 ***EU accession is a force for change directly through the acquis harmonization and indirectly through the positive impact on Turkey's financial markets.*** EU directives will guide reforms of for instance bank and insurance supervision as well as auditing and accounting. Importantly, EU accession establishes a medium term policy anchor, which creates trust among international investors that Turkey is on a convergence path with EU. Together with the economic program supported by the IMF, this has contributed to a significant extension of maturities on Government securities in local currency and reduction in interest rates. In February of 2005, the Government successfully marketed a 5-year bond[51] with a yield lower than the 1 year T bill, and international issuers have followed with maturities of as much as 10 years[52]. These are positive forces for the development of access to credit and in particular medium- and long-term credit products in local currency. As the market conditions for medium term credit are improving, increased attention should be paid to the divestment of state-owned financial assets and the institutional underpinnings of credit markets such as credit information, collateral regimes, and auditing and accounting standards.

5.3 ***The flip side of EU accession's positive effect on financial markets is that a real or perceived loss of political commitment to the EU accession process would have an adverse effect on the financial sector.*** While the financial sector is significantly more robust than in the run up to the 2000/2001 crisis, vulnerabilities remain. A loss of confidence could lead to increasing interest rates, a depreciation of the currency, and a slow down in the real economy thereby not only leading to losses in the sector, but also contributing to a contraction of credit to the private sector.

5.4 ***In sum, financial sector reform remains an unfinished agenda.*** As Turkey continues on its path of economic and financial stability, the key challenges are to (a)

[51] The bond carried a fixed coupon.
[52] A 10-year fixed coupon bond was issued by EIB.

complete the majority privatization of the state banks; (b) strengthen the prudential framework for banks and non-banks alike; and, to (c) create a more robust credit facilitating infrastructure that will enable sound and efficient expansion of credit to the private sector, which in turn will foster competitiveness, growth and employment.

5.1. STATUS OF FINANCIAL SECTOR REFORM AGENDA

5.5 ***Resolute reform steps have been taken since the financial crisis of 2000/2001, and the banking sector is now healthier.*** Between 1997 and 2003, 20 banks were taken over by the SDIF, and all but one have been liquidated, merged or sold[53], while one bank, Imarbank, was liquidated due to bankruptcy in 2003. Moreover, Kibris Kredi Bank was voluntarily liquidated without any burden to the public. The gross cost of the interventions amount to US$ 27 billion. As of June, 2005, US$ 3 billion had been recovered by the SDIF, and recently a large cell phone company was sold by the SDIF for US$ 4.55 billion included in the estimated additional US$ 11 billion to be recovered by the agency[54]. Capital adequacy of the banking system is now 23.6 percent, while gross NPL/total loans ratio has declined to 5.1 percent with a high provisioning level of 89.5 percent[55]. The bank supervisory system has been strengthened, and the deposit insurance fund has been separated from the regulator and has made substantial progress on resolving assets of the failed banks. The fiscal cost of restructuring the banking sector has been estimated at US$ 22 billion for the public banks and US$ 17 billion for the private banks transferred to SDIF for a total of US$ 39 billion or 27 percent of GDP. The total cost at US$ 39 billion is net of US$ 15 billion worth of recoveries on the SDIF banks that were taken over with US$ 32 billion worth of liabilities, and the SDIF expects to collect more than US$ 5 billion in addition over the next two years. The World Bank has supported the recovery and development of the banking sector through a series of adjustment loans, PFPSAL I-III.

5.6 ***Development of the financial sector is uneven.*** The banking sector is still the largest and most important part of the Turkish financial system (see Table 5.1). Although the public equity market has grown since the late eighties to a substantial size, the non-bank financial institutions (NBFI) sector[56] remain small, and the NBFIs are generally owned by or otherwise affiliated with the major banks. The Government debt market, including a repo market, is large and liquid with significant participation from domestic banks, foreign investors, domestic mutual funds, pension funds and insurance firms. In contrast, the corporate bond market is virtually non-existent. It was recently announced that starting January 2006, a 15 percent withholding tax will be applied to all financial

[53] This section draws on BRSA (2003), "Banking Sector Restructuring Program –(VII)".
[54] Please note that numbers in this paragraph have not been discounted to account for the time value of money, but rather are based on the cashflows converted into US$ at the time of the cashflow.
[55] Ratios are based on BRSA monthly bulletin and reflect October 2005.
[56] The sector includes mutual funds, pension funds, insurance, leasing, factoring, asset management and consumer finance firms.

instruments including Government debt securities, which were previously exempt, and that will contribute to increased appetite for corporate debt securities.

5.7 ***The contribution of the financial sector to efficiency and growth has been uneven too.*** A good financial sector contributes to economic wealth by providing an efficient payment system, by facilitating savings mobilization and investment, by transferring and sharing risks, and by allocating capital to where it is most productively applied. Turkey's financial sector provides a good payment system and has efficiently mobilized savings, but the mobilized funds have historically not been supporting private sector investments and have instead been largely invested in few large firms and in Government securities. Therefore, it has neither allocated capital to the private sector efficiently, and nor has it diversified risks for investors.

Table 5.1: Structure of the Financial Sector[57]

2004	Mill. YTL	Mill. US$	Share of sector	Share of GNP	Number of entities
Banks	306,452	228,781	63.9	71.4	50
State banks	114,917	85,791	24.0	26.8	6
Private banks	191,535	142,990	39.9	44.7	44
Insurance and pension /1	8,124	5,817	1.7	1.9	61
Non-life insurance	3,677	2,633	0.8	0.9	35
Life insurance and pension firms	3,893	2,787	0.8	0.9	24
Reinsurance	554	397	0.1	0.1	2
Leasing companies /2	4,227	3,027	0.9	1.0	82
Factoring companies /3	2,019	1,446	0.4	0.5	110
Brokerage firms	1,131	810	0.2	0.3	117
Investment trusts (net asset value)	1,183	847	0.2	0.3	32
Of which real estate investment trusts	1,179	844	0.2	0.3	9
Mutual funds	19,622	14,050	4.1	4.6	244
Portfolio management firms	na	na	na	na	21
Special finance houses	3,878	2,895	0.8	0.9	5
Stock market capitalization	131,672	98,299	27.5	31	na
Total	479,486	356,815	100	112	731

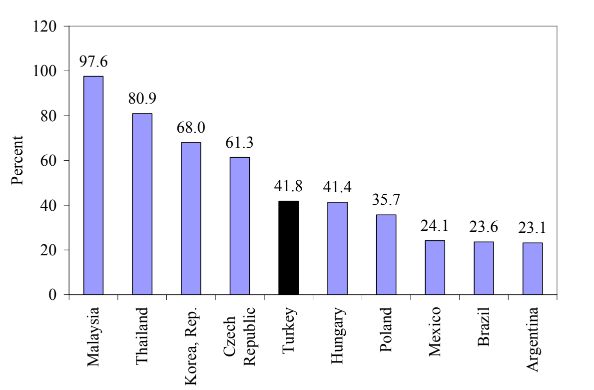
Sources: Treasury, ISE, and Banks Association.
/1 Consolidated for insurance, re-insurance and pension fund companies. Pension includes only the private pension funds. Emeklilik Sandigis are reportedly significant.
/2 Data reflect March 2004
/3 Data reflect 2002. Asset data are not available for 2004, but according to Factor Chain International, volume in US$ terms doubled between 2002 and 2004 suggesting that factoring assets are closer to 1 percent of GNP.

[57] As of October 2005, total assets of the banking sector were US$ 268 billion of which state banks accounted for US$ 86 billion.

5.8 ***The banking sector is responding to the changing market conditions by shifting assets towards credit to the private sector.*** The banking sector is transforming its business model from earning a healthy spread between bank deposits and T-bill interest rates into a business model based on the assessment of credit risk opportunities and providing value added services for clients. By international comparison, the banking system performs comparably well against other non-Asian emerging markets in terms of mobilizing deposits, but credit generation to the private sector remains very poor (Figures 5.1 and 5.2)[58]. The near term challenge for the banking sector is to expand its credit and value added services to customers in a prudent manner, while staying profitable in the face of pressures created by declining margins between T-bills and deposits and the increased competition in the sector.

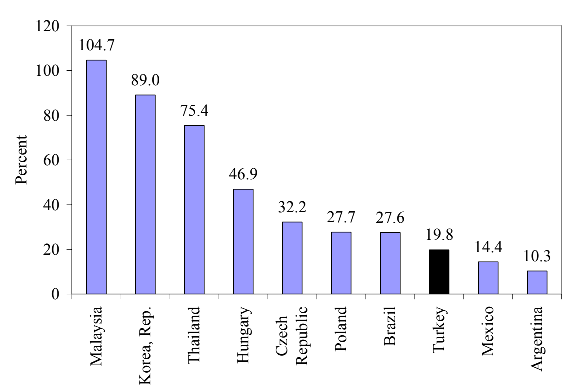
5.9 ***The recent rapid growth in credit to the private sector has been highly skewed towards consumer lending, highlighting the need for improving the SME credit environment.*** In the period 2002 to June 200, credit to the private sector increased from 14.8 percent of GDP to 20.5 percent of GDP[59]. However, about half of the growth was accounted for by retail lending, which increased from 14 to 31 percent of total credit to the private sector. In contrast, credit to firms in real terms has yet to reach pre-crisis levels. Moreover, firm credits remain concentrated with large firms, although that pattern is now changing along with the increasing credit. The skewed pattern highlights the need for improving the institutional underpinnings for an SME credit market.

Figure 5.1: Bank Deposits/GDP, 2004



Source: IFS and Staff Calculations

Figure 5.2: Bank Credit to Private Sector/GDP, 2004



Source: IFS and Staff Calculations
Note: Reflects claims on private sector of deposit money banks.

5.10 ***The transformation challenge is particularly great for the state owned banks***. State owned banks still retain 33 percent of banking system assets and are much more invested in Government securities than the private banks. In addition, the services

[58] In most banks and in most countries, loan to deposit ratios are below one, but occasionally such as in the case of Malaysia, credits exceeds deposits and are funded with borrowings, issued securities, equity and other non-deposit liabilities.
[59] Based on data from the CBT.

provided by the state banks tend to be less advanced than those provided by the private banks. In the aftermath of the 2001 financial crisis, each of the three large state banks was recapitalized and operationally restructured, and all three are now profitable. After privatizing these three large banks, beginning in 2006, Turkey will have a banking sector with less vulnerability and fewer potential distortions.

5.11 ***The forces for change in the banking system are strengthened by the increasing interest among foreign investors.*** Since December 2004, when Turkey got a date for starting accession talks with the EU, foreign investor interest in the Turkish banking sector has strengthened. Since January 2005, six foreign financial entities have bought or agreed to buy equity stakes in six domestic banks (see Box 5.1). The mentioned banks account for 24 percent of total Turkish banking sector assets or 38 percent of assets of the private banks. Foreign investors' share in total assets and in assets of private banks is 12 and 26 percent, respectively. Foreign investors bring in new capital, lower cost financing, new governance requirements and risk management technologies, thus improving the access to finance for Turkish firms and enhancing the competitiveness of the sector.

Box 5.1: Foreign Strategic Investments in the Turkish Banking System

- **TEB,** BNP Paribas bought 50 percent of the holding company for the bank
- **Koc Bank,** Unicredito bought 50 percent of the holding company for the bank
- **Sekerbank,** Rabobank acquired a 51 percent stake
- **Yapi ve Kredi Bank,** the Koc/Unicredito partnership bought a 57.4 percent stake in the bank.
- **Disbank,** is acquired by Fortis, which took an 89.3 percent stake in the company
- **Garanti Bank**, strategic owner, Dogus Group, sold about half of its shares, 25.5 percent of the total stock, to GE Consumer Finance.

5.2. REFORM AREAS AND CHALLENGES AHEAD

5.12 ***While substantial post-crisis progress is recognized, a multi-pronged reform agenda lies ahead.*** The three large state banks are yet to be sold to private investors. The supervisory frameworks are still in the process of building capacity while adapting to EU and Basel II requirements. The credit markets, which to a great extent remained dormant during the time of economic volatility, need institutional support in the areas of auditing and accounting, credit information system, collateral regime, enforcement of contracts, as well as more sector specific reforms, for instance in the development of a mortgage market. By pursuing such reforms, Turkey has the prospects for a vibrant financial sector that will provide a key pillar for more broadly developing the private sector by allocating credit in a more sound and efficient manner. The table in the beginning of the study summarizes the key recommendations by topic and identifies priorities under existing EU initiatives.

5.13 ***Almost all the major private banks are affiliated with large financial and/or industrial conglomerates through their shareholders.*** Related lending remains prevalent, as reported direct and indirect loans to shareholders amount to as much as 15 percent of capital in the Turkish banking system. In addition, almost all major banks have subsidiary or otherwise affiliated financial institutions such as life and non-life insurance firms, leasing firms, factoring firms, investment banks, and asset management companies. This presents governance and supervisory problems, because financial reporting is often incomplete without a consolidated group reporting requirement in place. While the reporting requirements for banks in Turkey do require the preparation of financial statements for the consolidated group, importantly, the consolidation does not include non-financial firms. In addition, the ultimate parent of groups that include banks is not required to present consolidated financial statements. Thus, consolidated supervision of the financial groups is incomplete and vulnerabilities are opaque, as affiliated firms have a comparative advantage over non-affiliated firms in accessing credit from affiliated banks. However, these issues are being addressed by the new Banking Law enacted in 2005 and its secondary legislation under preparation. The new banking sector legal framework is closely in line with the EU standards. Provisions under the new law include; lending to entities affiliated with the bank is limited to 20 percent of equity and the bank's board may extend that limit to 25 percent under certain condition, which are in line with EU directives.

5.14 ***The financial sector is still taxed with transaction taxes that are distorting financial intermediation.*** The Banking and Insurance Transaction Tax (BITT) and the Resource Utilization Support Fund (RUSF) transaction tax are currently applied to credits and insurance premiums and have contributed more than 0.5 percent of GDP to annual fiscal revenues. For the banks, the tax base is interest paid by private borrowers leading to an increased loan-to-deposit interest rate spread and creating an impediment to developing access to credit for the private sector. The Government should consider abandoning the transaction-based taxes. At the same time, it would be advisable to reassess the tax system for the financial sector to make sure that tax neutrality prevails and distortions are minimized.

5.15 ***Auditing and accounting represents a critical area in need of reform in Turkey.*** While a good accounting may have limited merit in a high inflation environment, it is becoming a critical tool for improved transparency and governance, and it will be critical component for further developing credit markets as well as the corporate bond and public equity markets.

5.16 ***With the right framework in place the mortgage market is poised for strong growth.*** The *mortgage market* represents a high potential credit market in Turkey, and efforts led by the Turkish Capital Markets Board are underway to modernize and promote the primary market and establish a secondary market in order to provide alternative funding mechanisms to the primary lenders in the form of mortgage backed securities and/or mortgage bonds. In the near term, the priority will be to finalize the mortgage law, and in the medium term the greater challenge will be to effectively implement the law and establish effective regulation and supervision of the market.

5.17 ***Credit information and the collateral regime should be improved.*** These are important pillars for the credit environment for bank credit as well as for leasing, factoring and other credit institutions. The current state of credit information on SMEs is poor, but efforts by a private sector credit bureau are underway to improve credit information on firms, and these efforts should be supported by the necessary legislation and regulation.

5.18 ***The insurance sector remains poorly developed, but is poised for strong growth as the demand for products such as mortgage insurance grow.*** The supervisory regime has been highlighted by the EU as particularly poor, and a draft law designed to improve the regime has been lingering for some years. Efforts should be accelerated to modernize the supervisory framework in line with the EU Acquis.

CHAPTER 6. FOSTERING TECHNOLOGY ADOPTION, INNOVATION, AND SKILLS

6.1 Harnessing the knowledge factors—technology, innovation, quality and skills—is essential for increasing Turkey's productivity and ensuring alignment with EU policies and strategies. Productivity improvements are driven by absorption of existing technologies, innovation, collaboration between firms and research centers, use of quality standards and the availability of a skilled labor force that can stimulate technology adoption and innovation.[60] Admitting that the knowledge factors are drivers for productivity and growth, the European Commission placed them at the core of its economic policy objectives by issuing a Green Paper on Innovation in 1995 and by setting as one of its key objectives at the 2000 Lisbon Council Summit "making the European Union the most competitive and dynamic knowledge-based economy by 2010." The 2003 Innovation Communication identified specific challenges that candidate countries must address in the knowledge areas in order to improve the performance of the enlarged EU. These are addressed in several sections of the Acquis, including Chapter 25 on Science and Research; Chapter 7 on Intellectual Property Law; Chapters 1 and 4 on Free Movements of Goods and Capital; and Chapter 26 on Education.[61]. This CEM chapter highlights key challenges related to technology adoption, innovation, quality standards and skills in Turkey, both to meet Acquis requirements and, more broadly, to improve the country's productivity, which is essential to accelerate long term economic growth and generate employment.

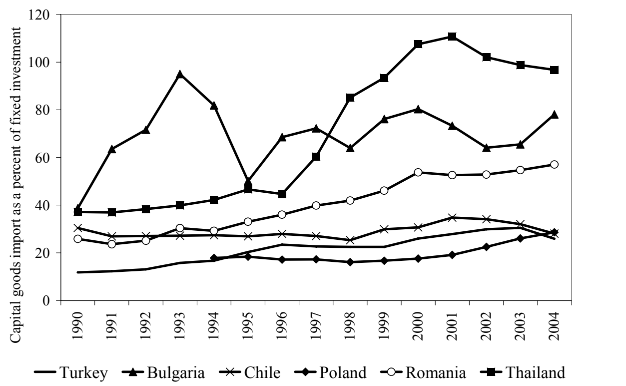
6.1. PROMOTING TECHNOLOGY ADOPTION AND INNOVATION AT THE FIRM LEVEL

6.2 ***The three main avenues for acquiring existing technology in an open economy — foreign direct investment (FDI), licensing, and importing capital goods — are underutilized in Turkey.*** As explained in chapter 1, FDI has boomed in 2005, to an estimated 2.6 percent of GDP, after having remained compressed at less than 1 percent of GDP in the 1990s, despite a worldwide increase by a factor of 12. For FDI to meet its potential as a means of absorbing technologies the increased observed in 2005 will have to be sustained in the future. Import of capital goods, a major absorption channel, is only 26 percent of total investment, about one third of the proportion in Bulgaria and one fourth of that in Thailand (Figure 6.1). Licensing is similarly weak at about US$2 per

[60] For a detailed discussion of the impact of technology, innovation and skills on productivity, see *Closing the Gap in Technology and Education* (World Bank, 2003).
[61] European Commission, Turkey 2005 Progress Report. November 9, 2005.

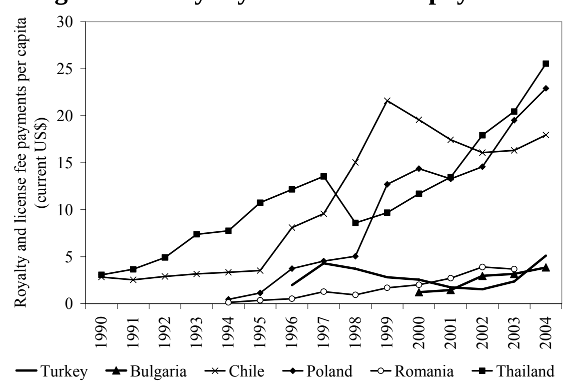
capita, one-tenth of the amount in Poland and comparable to the amount in Korea during the 1960s (Figure 6.2). Turkey has had, however, some success in specific industries. Multinational corporations have played a major role in developing the automotive sector, with high positive spill-over effects on the local economy. Licensing agreements, particularly in the automotive, automotive spare parts, and white goods sectors, have also led to an accumulation of know-how and the development of local technological capacities.[62]

Figure 6.1: Capital goods import/investment



Source: World Bank.

Figure 6.2: Royalty and license fee payments



Source: World Bank

6.3 ***Turkey's progress on innovation, in terms of investments in R&D and patents filed by Turkish inventors, remains uneven.*** Both overall investment in R&D (GERD at 0.66 percent of GDP at the end of 2002) and the share of R&D financed by the private sector (41 percent of the total in 2002) have increased (Figure 6.3) and are in line with Turkey's level of development. The latest budget confirms that the government is moving in the right direction — funds allocated from the 2005 budget are higher than in all previous years. However, and notwithstanding recent initiatives to increase institutional capacity –including the creation of the Turkish Research Area (TARAL), which has as one of its key objectives that of increasing institutional capacity for innovation and supporting public-private cooperation in this area —more effort is needed to ensure that Turkey has coherent programs and capacity to utilize these resources effectively. Priorities for the future are improving firms' investment in R&D, a key determinant of a country's ability to ascend the technological ladder, and ensuring productive use of public R&D resources. The number of patents filed by Turkish innovators in the US, in the EU and at home is lower than for most comparator countries.[63] Protection of Intellectual Property Rights (IPR) has recently been improved through (among other initiatives) changes to the law on trademark protection to ensure compliance with other

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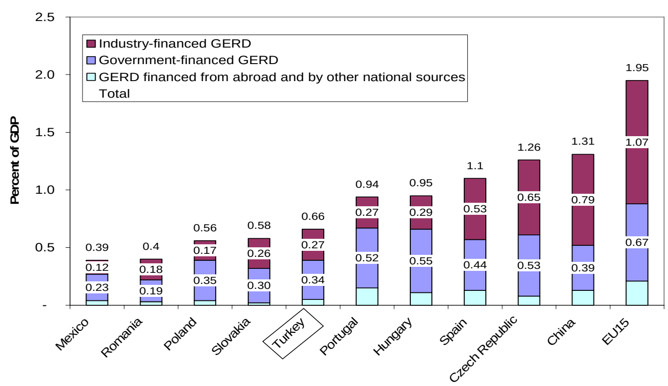
[62] S. Elci, *Innovation and Technology* (background paper, 2005).

[63] Turkish inventors filed 0.4 and 0.9 patents in the US and the EU Patent Office respectively, versus 1.1 and 2.0 filed by Bulgarian inventors, and 3.9 and 8.2 filed by Czech inventors. Turkey also underperforms comparator countries in filing patent applications at home: 8 patents filed per million people, versus 39 in Bulgaria and 60 in the Czech Republic. US patent figures are from USPTO (2003), European figures are from the European Patent Office Annual Report (2004), and national patent figures are from WDI (2002).

Turkish laws and EU requirements, decrees related to protection of pharmaceutical and medical processes and products and biotechnological inventions, and administrative changes to the Turkish Patent Institute (TPE). In addition to these recent changes, further effort is needed to enhance both IPR legislation and IPR enforcement, in turn ensuring full compliance with *Acquis* requirements and fostering productive innovation.

6.4 ***Investments in innovation are promoted through tax incentives, matching grants and reimbursable loan schemes, while venture capital is almost nonexistent.*** There are four main *fiscal provisions to support R&D* in Turkey. Turkish firms do not find tax postponement or support for R&D investment beneficial, and do not use these schemes. On the other hand, the incentives provided by the Technology Development Zone and R&D Tax Exemption Laws are very generous[64] and should be reviewed to assess their effectiveness, fiscal impact and consistency with the *Acquis*. Fiscal incentives often do not benefit SMEs, which have insufficient profits to use the tax benefits and do not record R&D expenses separately on financial statements, making them ineligible. TUBITAK-TIDEM, TTGV and KOSGEB offer matching grants and reimbursable loans for innovative initiatives. Before scaling up, it is important that the outcomes of existing and new programs be evaluated on the basis of international best practices. Finally, although Turkish legislation was modified in 2004 to promote venture capital investment, both supply- and demand-side factors still constrain the VC industry in Turkey.

Figure 6.3: Gross expenditure on R&D, total and composition: 2001-2003, most recent data available



Note: Data from 2003 except Mexico (2001) and Turkey and Portugal (2002).
Source: OECD, Main Science and Technology Indicators database, 2005.

6.5 ***Industry/research collaboration — a key condition for focusing research on productive purposes and stimulating technology adoption and innovation at the firm level — is limited.*** The main reasons are insufficient intermediaries, a lack of incentives to collaborate, perceptions that the quality of Turkish scientific institutions is low, and cultural differences between academia and business. The 2001 "Law on Technology

[64] For all firms: deduction of 40 percent of R&D expenditures from taxable corporate income, in addition to the ordinary Investment Tax Allowance (deduction of 40% of investment expenditures); for firms located in technology development zones: exemption from CIT for software development and R&D activities, as well as PIT-exemption for salaries of R&D personnel until the end of 2013.

Development Zones" provides incentives for firm-university collaboration by allowing private companies in technoparks to hire university researchers and researchers to start companies in the parks. However, these incentives are unavailable outside technoparks. In fact, researchers who provide services to firms not located in technoparks must transfer 70 percent of their income to their universities and cannot start their own businesses. This isolates scientists and researchers from the industrial world. Other initiatives to facilitate firm-research collaboration include TUBITAK-TIDEB's University-Industry Joint Research Centres (USAMPs), KOSGEB's Technology Development Centers targeting SMEs (TEKMERs) and TTGV's technology development financing program, which helps create linkages between firms and the R&D community. In 2005, TUBITAK also initiated a National Public Research Program to encourage public agencies to establish partnerships with industry and academia, and an Industry Liaison Office in cooperation with the Chamber of Commerce (TOBB), aimed at training TOBB staff to intermediate between industry and TUBITAK. Despite the recent increase in technoparks, USAMPs and TEKMERs and more recent initiatives, the Turkish innovation infrastructure is not sufficient to jumpstart university-firm collaboration throughout the country.

6.6 ***Policy and legal changes are needed to improve incentives for firm-level innovation and collaboration between researchers and firms, including extending to all universities incentives currently granted only to technoparks.*** University researchers, excluding students, can benefit from their own research in Turkey — an innovative academician owns the related IPR and has the right to commercial revenues from patents the research generates. While this policy is satisfactory, additional measures are needed to: (a) extend the benefits currently provided to researchers working in technoparks to all universities by eliminating the rule requiring academicians working outside technoparks to transfer to universities 70 percent of their extramural income; (b) provide students with the same rights as researchers, because they may contribute to increasing productive innovation and patent levels in Turkey; and (c) create patent cost sharing schemes between inventors, universities and governments, and introduce clear rules about IPR ownership between researchers, research institutions and private firms.

6.7 ***The industrial and intellectual property rights (IPR) legislation should be reviewed and IPR enforcement strengthened***. As mentioned above and indicated in the EU 2005 Report on Turkey's Progress towards Accession, Turkey has already significantly improved its IPR regime. However, further progress is needed to ensure full alignment with the *Acquis* on both IPR *legislation* and *enforcement*.[65] The final legislation should be reviewed in collaboration with international experts and relevant stakeholders to ensure that it meets international requirements. Improving the IPR regime also requires strengthening of IPR enforcement. The most important measures are: increasing the autonomy of the Turkish Patent Institute (TPE) and further improving its staff's capacity, knowledge and experience with registration and protection of IPR; further increasing the number of IPR courts and training programs for judges and prosecutors to ensure they can address the many IPR infringement cases; and limiting

[65] European Commission, Turkey 2005 Progress Report, Chapter Seven on Intellectual Property Law, pages 66-68. November 9, 2005.

piracy and counterfeiting by applying sanctions and improving border controls following the EC Directive on IPR enforcement.

6.8 ***Increase the number of intermediaries that can improve communication and collaboration among firms, universities and research centers in Turkey.*** Innovation intermediaries (technoparks, USAMPs, TEKMERs, and the recent Industry Liaison Officers) should be evaluated so only successful approaches will be replicated more broadly.[66] TUBITAK has recently started promoting public-private collaboration by requiring public agencies to establish consortia with universities and private firms in order to be eligible for funding, and by providing technical assistance and seed funds to young entrepreneurs. Successful international programs stimulating public-private collaboration which could be taken as a useful benchmark include the MAGNET program in Israel, TEKES in Finland and ATP in the US. The Spanish private-public Technology Innovation Centers (*Centros de Innovacione Tecnologicas, or CITEs*) may prove a beneficial model for promoting technology adoption among Turkish SMEs.

6.9 ***The design of the incentive system to increase finance for private R&D (i.e., fiscal incentives, matching grants and reimbursable loans) should be reviewed.*** The results of existing fiscal incentive schemes should be evaluated to assess their effectiveness, fiscal impact and consistency with the *Acquis*. Alternatives to fiscal incentives should be preferred for stimulating private R&D and innovation, particularly for SMEs. International best practice shows that well-designed matching grant schemes may be more beneficial in enhancing R&D investment and innovation. All matching grant and loan programs should periodically be assessed against international best practice, including the SPREAD program in India and, for matching grants, the experiences of Israel, Finland, Malaysia, Hong Kong, Chile and Mexico. Both TUBITAK and KOSGEB have started evaluating the results of their programs. External reviews could add value to the internal assessments by providing inputs based on lessons learned from international best practices. Finally, an overall support framework should be designed to: (a) replicate schemes with the highest impact on innovation, (b) assess and reduce overlap among providers, (c) increase collaboration between institutions and the funding ministries, and (d) reduce administrative hurdles in financing programs, which beneficiary firms say are a major drawback. The results of the agencies' recent efforts to streamline processes (e.g., TUBITAK's improvement in its TIDEB program including introduction of an advanced payment option in its R&D financing schemes) should be evaluated and complemented by similar initiatives aimed at streamlining administrative hurdles throughout the financial process.

6.10 ***Improving the effectiveness of the Turkish National Innovation System is important for conforming to EU policies and promoting innovation and technology absorption.*** An effective NIS is a prerequisite for successful technology adoption and innovation. Key measures to improve the Turkish NIS include: (a) reviewing the institutional capacity of TUBITAK to ensure alignment with international best practices;

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[66] The Ministry of Industry and Trade is developing a monitoring and evaluation (M&E) system to assess the results of existing technoparks. The M&E system should be designed on the basis of international best practices.

(b) complement ongoing internal assessments of TUBITAK's programs and affiliate institutions (e.g., TUBITAK-TIDEM, MAM and UME), with external evaluations; (c) establishing regional policies, systems and infrastructure to support innovation and technology development at the local level;[67] and (d) ensure that the national innovation strategy places productive innovation at the heart of all science and technology policies by strengthening the role of the business sector in the innovation process and broadening the definition of innovation to include non-technological improvements (e.g., organizational and process changes).[68]

6.2 IMPROVING THE NATIONAL QUALITY SYSTEM AND THE USE OF QUALITY STANDARDS

6.11 ***Turkey has gone a long way towards establishing a modern quality standards regime, but further improvements are needed.***[69] Standards adoption enhances firms' capacity to export, absorb technologies and integrate with supply chains, in turn increasing productivity. Adoption of quality certification requires a well functioning National Quality Certification System (NQCS), comprehensive legislation and regulations, and sufficient accreditation and certification institutions. Turkey has replaced almost all national standards with EU and international standards and has a well functioning NQCS, comprising the Turkish Standard Institute (TSE), an accreditation agency (TÜRKAK) and a National Metrology Institute (UME). TÜRKAK, a full member of the European Cooperation for Accreditation, will soon be eligible for membership in the European Cooperation for Accreditation (EA-MLA), ensuring that its accreditations of Turkish notified bodies, its EC-type examination certificates and its conduct conformity assessments will be recognized in the EU. The transposition of harmonized European legislation into Turkish national legislation, as the first necessary step on the way towards full implementation of the legislation, is now nearing its completion. Public authorities are now at the stage of implementation of the transposed legislation. This requires, among other things, the establishment of a sound functioning market surveillance system with improved administrative and technical infrastructure.

6.12 ***Legal and institutional changes are needed to further improve Turkey's National Quality System, coupled with provision of incentives to labs and firms to increase the use of quality standards.*** First, it is in Turkey's interest to recognize tests

[67] On Turkey's overall need to improve decentralization, see EU 2005 Progress Report on *Acquis* Chapter 22 on Regional Policy and Coordination of Structural Instruments.

[68] While Turkey has developed several strategic plans to support innovation, they have focused on R&D and science policies. The main science and technology objectives adopted by BTYK in September 2004 – confirmed by BTYK's *Science and Technology Strategies Implementation Plan* for the period 2005-2010—are: increasing the share of GERD/GDP to 2 percent by 2010 (from 0.66 percent in 2002) and the number of full-time equivalent R&D personnel to 40,000 (from 28,964 in 2002), while increasing the number of vocational and technical staff proportionally. These are important objectives, but the strategy needs a clearer focus on productive innovation and technology adoption at the firm level and a stronger emphasis on output (rather than input) measures.

[69] B. Kaminski, *Technical Standards Regime and Trade* (background note, 2005)

and standards for products originating in countries with which the EU has signed mutual recognition agreements (MRAs),[70] It is also in Turkey's interest to obtain similar recognition for its products from the same countries. This would reduce the cost of imports by increasing competitive pressures on preferential (i.e., free trade agreement) exporters to Turkey and Turkey's quality standards. Second, some sector specific legislation should be aligned with the *Acquis* requirements (including for pharmaceuticals, cosmetics and chemicals), while food safety and foodstuff legislation should be adopted. Third, it is important to complete the process leading to TURTAK's international recognition. Fourth, TSE's responsibilities and functions should be compared with those of similar institutions operating in other countries. Fourth, there is a need to update the quality management system regarding standardization and development of a business plan on standardization work.[71] Fifth, the government should encourage creation of private secondary metrology facilities to ensure national coverage. Finally, it is essential to increase Turkish labs' and firms' requests for accreditation and certification. Matching grants have proven successful at encouraging adoption of quality standards in several countries.

6.3. ALIGNING THE SKILLS OF THE LABOR FORCE WITH THE NEEDS OF THE PRIVATE SECTOR

6.13 ***Weak educational attainment is a bottleneck for widespread adoption of advanced technology and innovation.*** Turkish pupils do not acquire key skills for the knowledge-driven economy (e.g., problem solving, stating relationships between events, making complex inferences, creativity and continuous learning), leaving them out of sync with the needs of the private sector. Fifty-five percent of Turkey's 15-year-olds perform at the lowest level on the PISA assessment of mathematics-quantitative proficiency, whereas the average in OECD countries is less than 21 percent (Figure 6.4). Similar results are found in reading literacy. Universities' traditional academic curricula do not reflect the needs of the private sector. Partially as a result of this, unemployment among recent university graduates is high. Turkey's vocational schools, both secondary and post-secondary, also provide insufficient quality education and training. This is particularly worrisome because employers in Turkey face a shortage of mid-tier, technician level workers.[72]

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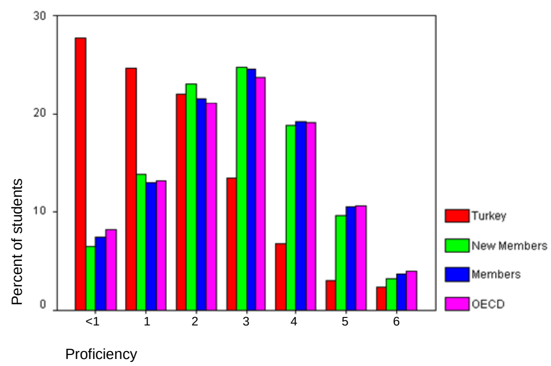
[70] These countries include Australia, Canada, Israel, Japan, New Zealand, Switzerland and the United States.

[71] EU 2005 Turkey Progress Report, page 56.

[72] For a full analysis of education in Turkey, see the *Turkey Education Sector Study* (World Bank, 2005).

Figure 6.4: Distribution of students by PISA proficiency level in Turkey and EU, 2003



Source: Education Sector Study, The World Bank, 2005

6.14 ***Improving the skills of the labor force and ensuring that they match the needs of the private sector requires rethinking the education system at all levels***.[73] It is essential that Turkey continues to reform and modernize primary and secondary school curriculum and teaching, as well as the structure of secondary education, to ensure that all Turkish students can acquire the skills that are needed by the labor market today and can serve as a foundation for lifelong learning in the future, including skills in problem solving, creative thinking. and communication.[74] Reforms are also needed to encourage tertiary education institutions to differentiate their missions and strategies, with a different balance of effort across the functions of teaching, research and service provision, so as to provide more viable and desirable options for graduates of high school interested in pursuing postsecondary studies. The admissions system for tertiary education should also be modernized to provide incentives for all young people (both in vocational and general secondary schools) to study and learn the core competencies needed to have successful careers in a globally competitive labor market. There is a need to consolidate and refocus post-secondary vocational schools (MYOs) into fewer, more efficient, and higher quality institutions with their own budgets and missions, while maintaining the academic link to universities. Turkey should also consider using its funding of postsecondary education to upgrade MYOs into technical colleges or polytechnic institutions granting two- to four-year degrees in a broad variety of areas so as to more flexibly provide high end technical skills to its graduates, in line with labor market demands. Finally, more emphasis should be given to cultivating lifelong learning systems for continuously upgrading human capital and to promoting continuing vocational training.[75] This can be accomplished by providing incentives to firms to both hire technical personnel and provide relevant training.

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[73] See the *Turkey Education Sector Study* (World Bank, 2005).
[74] The Government hopes to address these quality constraints by means of a comprehensive program of curriculum modernization that it launched in 2004 to improve teaching and learning across all of the core subject areas.
[75] On the importance of lifelong learning, see also the EU 2005 Turkey Progress Report, page 118.

CHAPTER 7. INFRASTRUCTURE SERVICES FOR IMPROVED COMPETITIVENESS

7.1 ***In key infrastructure service areas, Turkey has already made substantial progress in designing the changes to legal and regulatory structures needed to meet EU acquis requirements.*** While much implementation work remains, Turkey recognizes that the combination of internal market liberalization and effective integration with international markets offers efficiency gains that will increase competitiveness and employment growth.[76] This chapter of the CEM focuses on the nexus between EU accession and growth in three infrastructure sectors – Information and Communications Technology (ICT), transport, and energy. Within these sectors, the Government has choices to make in regard to phasing and timing of the changes needed to meet *acquis* obligations. This chapter offers guidance from Bank and international experience.

7.2 ***Infrastructure services are an important driver of growth.*** Transport and communications contribute approximately 15 percent of Turkey's GDP. The importance of these services reflects both internal demand and Turkey's geopolitical position – as a link between Europe and Asia. Energy services contribute an additional 3.5 percent of GDP. Each of these services offers the potential for substantial efficiency gains through structural changes – typically already underway – and regulatory strengthening.

7.3 ***Although Turkey is relatively well endowed with infrastructure compared to other emerging economies, it falls short of OECD and EU standards.*** Businesses are burdened by costly, low quality backbone infrastructure services. In particular, the cost of telecommunication services and energy remains among the highest in the OECD area,[77] while quality is among the worst in that area.[78] The dominant transport mode – road -- suffers from localized congestion and deteriorating road quality. While daunting, this combination suggests that much can be gained through more efficient, user financed, operations. The largest transformational challenge is moving from monopolistic state entities providing services toward the mix of private and state that characterizes efficient higher income economies. Of course, the infrastructure implications of meeting all

[76] Embodied in the Turkish National Programme for the Adoption of the Acquis
[77] OECD, Economic Survey of Turkey, Paris, 2004.
[78] The Turkish Industrialist's And Businessmen's Association makes this point in their Working paper "Investment Environment And Foreign Direct Investments In Turkey" prepared for Investors Advisory Council Meeting, 15 March 2004, İstanbul TS/SEK/04-06

acquis requirements go well beyond those discussed in this chapter. In particular, the environmental dimension, with its very large financial costs, will be dealt with in a later CEM.

7.1. INFORMATION AND COMMUNICATION TECHNOLOGIES

7.4 ***Turkey has recently enjoyed very rapid growth in telecommunications, driven by expansion of cellular service.*** Yet internet use remains relatively low compared to other new EU member states, broadband coverage is similarly low, quality problems in mainlines remain pervasive, and prices high. The importance of further ICT development can be seen in the EU context, where ICT is credited with 50 percent of productivity growth between 1995 and 2000. Although productivity impact estimates have not been made for Turkey, if Turkey's recent gains in telecommunications coverage can be extended to other elements of ICT, similar gains can be expected.

7.5 ***Turkey brings strengths in facing the challenge of ICT development.*** The telecommunications regulatory authority (TK) and competition authority (RK), have proven effective despite working in a difficult legal environment. That legal environment will improve as Turkey enacts and implements the relevant *acquis* provisions. Turkey has moved forward by ending the monopoly rights of Turk Telekom in 2003 and with a successful initial tendering for Turk Telekom in 2004 and the completion of the transaction (a block sale of 55 percent) in 2005, an important step toward market liberalization and improved efficiency. But Turkey's progress in telecommunications needs to be complemented by a strategy leading toward convergence to the EU's evolving ICT benchmarks.[79] Responding to an environment in which Turkey's household internet access is at 8.7 percent while the EU25 is at 42 percent, the government has intensified efforts to increase internet use, giving priority to schools from 2006.

7.6 ***Complementary actions, beyond the Acquis, are needed to facilitate ICT diffusion.*** The importance of ICT as the enabler of the Information Society was enshrined in the Lisbon Strategy which represents Europe's response to the challenge of accelerating growth and job creation in the 'knowledge based economy'. The implementation of the *Acquis* for electronic communications will provide the regulatory and business climate for increased investment in ICT and thereby improve the competitiveness of Turkish businesses. *Acquis* requirements must be, however, complemented by supporting legal instruments related to data protection, privacy, and e-security, as well as a panoply of initiatives related to the application of ICT in such activities as e-government, health, learning, work, business, mobility, transport, content and inclusion. Possibly discriminatory taxes also burden the development of the mobile

[79] See http://europa.eu.int/information_society/topics/ecomm/index_en.htm

segment—a key underpinning of the ICT sector. In response, the Ministry of Finance is now reviewing sector tax policy.

7.7 ***Continuing market liberalization will play a key role.*** To promote ICT, the European Commission has emphasized the importance of continued implementation of Turkey's efforts to liberalize the ICT market, with a view to increasing competition and lowering prices.[80] The recent increase in market entrants signals the potential for meeting this goal, but legislative and regulatory behavior must work to curtail monopolistic behavior on the part of established providers. This effort, which has little fiscal cost to government, should head the ICT agenda. In particular, post-privatization of Turk Telecom, both TK and RK will need to be more vigilant regarding the progress of liberalization in order to ensure that the full benefits of competition in the sector materialize. A private Turk Telekom retains considerable market power over bottleneck facilities essential to the development of competition.

7.8 ***Turkey should consider a mutually reinforcing set of actions that further speed the development of the ICT sector.*** In addition to assigning cabinet-level responsibility for leading that work, Government should take the following set of priority actions:

- The transposition and effective implementation of the *acquis* for electronic communications well before EU accession.
- A re-examination by government of the definition and implementation of its ICT policy. Government needs to confirm their objectives regarding the e-agenda, including the aspect of social inclusion (especially regarding farming and rural areas) and broadband, and the role it will play in these developments, thereby sending clear signals to the market. The government can play a vital role through its procurement of ICT, both by fostering more intense competition in and by encouraging the aggregation of demand for certain goods and services to bring about lower prices.
- Reduction of taxes if review shows them to be discriminating against the mobile sector.
- Establishment of monitoring and evaluation schemes to measure progress and the fulfillment of objectives and reporting regularly.

7.2. LINKING UP WITH TRANS-EUROPEAN NETWORKS

7.9 ***The critical role of efficient transport in growth and the effective integration of the internal market lead to high EU attention to the sector.*** The most recent (October, 2004) EU Progress Report for Turkey concludes: "Some progress could be recorded in all transport modes, excepted air transport, but overall alignment remains limited and all modes present problematic issues." With the EU now Turkey's most important foreign

[80] The EC makes this point in their "2004 Regular Report on Turkey's progress towards accession" {COM(2004) 656 final}

trade partner, progress in this area must focus not only on sector-specific reforms, but also on comprehensive trade and transport facilitation in major corridors implementing the EU Integrated Border Management Initiative and EU policies to address modal imbalance.

7.10 ***Major efforts remain to be made in implementing the National Program for the Adoption of the Acquis Communautaire.*** In the transport sphere, the following actions have been initiated as part of the Revised Accession Partnership short-medium term action plan: (i) alignment on road transport legislation (market access, road safety as well as social, fiscal and technical rules), railways and air transport (particularly air safety and air traffic management); (ii) ensure effective implementation and enforcement of transport legislation, particularly as regards maritime safety, road transport as well as air transport; (iii) complete alignment with EU maritime legislation in safety and non-safety areas; improve maritime safety, in particular improve the performance of maritime safety administrative institutions, first as a flag State, and then as a port State, and guarantee their independence; (iv) implement a program of adaptation of the Turkish transport fleet, particularly maritime and road transport, to Community technical norms; and (v) adopt a program with a view to identifying main transport infrastructure needs in Turkey and related transport-network projects, in coherence with the European Community TEN-transport guidelines. In terms of regulating the road transport market, two pieces of new national legislation (Road Transport Law and Road Transport Regulation) entered into force, elaborated in accordance with EU legislation concerning access to the market and the profession.

7.11 ***Government is reviewing a draft National Transport Strategy for approval.*** In addition, a Transport Infrastructure Needs Assessment (TINA) study is currently being carried out by the State Planning Organization (SPO) and Ministry of Transport (MoT), with a view to identifying main transport infrastructure needs in Turkey and related transport-network projects, in coherence with the European Community TEN-transport guidelines. One clear message from analytical work to date is that a shift is needed between the various modes of transport, especially for the transport of freight which should be gradually – but steadily – transferred from the road to the railways. Due to the steady increase of containerized cargo, intermodal transport systems should also be promoted to improve the connections between the various modes of transport, e.g., improved railway linkage to ports.

7.12 ***The challenges facing the transport sector go well beyond meeting the needs of the acquis.*** Road transport, the mainstay of the system, with 92 percent of freight traffic, has faced substantial underinvestment in maintenance and rehabilitation over the past decade. The percentage of roads in the state road network rated in good condition has slipped from 80 percent in 1993 to only 45 percent in 2003. The development of a sustainable model for road sector financing presents a major challenge.

7.13 ***National Road Administration (KGM) is a fairly effective organization dedicated to gradually increasing its efficiency in road management.*** However, it must do so in the face of: (i) insufficient funding for the maintenance and rehabilitation of the road network, especially with regard to rural roads and motorways; (ii) high injury and fatality rates from road crashes. Investments in traffic safety have led to recent progress, however, Turkey is still lagging behind European countries; and (iii) the need to further develop outsourcing road works to the private sector, especially through performance based contracts.

7.14 ***The rail system has been a major drain on government fiscal resources, while handling only some 5.7 percent of freight and 2.2 percent of passenger traffic.***[81] In 2004, TCDD, the Turkish State Railways, lost US$780 million (US$ 470 milliom including subsidies) and total government transfers, including the capital investment program, amounted to US$1,023 million, or 0.4 percent of GDP. Although a very large sum, it must be noted that as a share of GDP this level of budget support together with uncovered losses is broadly comparable with other railways in middle-income countries in Europe[82]. Apart from the fiscal implications, within the transport sector, TCDD faces the greatest challenge in meeting the *acquis* requirement that social services be separated from commercial services.

7.15 ***In response to these challenges, the Government has taken a clear commitment for in-depth reform of TCDD***, as will be defined in two new Laws: (i) a Railway Law providing a new legal framework for railway activity consistent with EU directives; and (ii) a TCDD Law supporting the reorganization of the national railway company. The restructuring includes the separation and eventually the privatization of the affiliated companies and of the ports operations, the reshaping of the labor force and the reduction in redundant staff. A social plan is to be implemented gradually in order to minimize the negative impact resulting from the staff adjustment process.

7.16 ***Port and rail sector reform are interrelated, as TCDD now manages the seven most important ports that are currently being privatized.*** The ports have been profitable, if inefficient, and at the end of 2004, the High Privatization Council annnounced that the Bandirma, Izmir, Samsun, Derince, Mersin, Iskenderun ports would be included in the privatization program.[83] Port assets will remain public property, with TCDD involved in post-privatization monitoring of investor's performance. The privatization plan calls for a transfer of operational rights for a 36 year duration.

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[81] The EC makes this point in their "2004 Regular Report on Turkey's progress towards accession" {COM(2004) 656 final}

[82] Croatian Railways (1.3% of GDP), Romanian Railways (0.7%), Bulgarian Railways (0.6%), Poland (0.4%).

[83] Privatization High Commission decision 2004/128, December 30, 2004

7.17 ***Port privatization requires careful design.*** The Bank has discussed the port privatization process with the Privatization Administration and raised a number of concerns, including: (i) the ability to effectively regulate the private monopoly that will now control each major port; (ii) tariff policy after the initial three year freeze; and (iii) whether the technical documents adequately address pre-qualification and other concerns. One of the key lessons from the Latin American port privatization experience of the past decade was the importance of an adequate regulatory framework for concessions. The Undersecretary for Maritime Affairs now acts as the National Port Authority with the power to: (i) regulate port tariffs; (ii) ensure security and safety within the Turkish ports; and (iii) manage the Harbor Masters' functions and responsibilities. The Undersecretary is involved in the design of the privatization process and will therefore play a key role in ensuring that recent international experience is incorporated in the regulatory approach finally adopted.

7.18 ***In maritime transport progress has been made, except for national cabotage services.*** The sector in Turkey is fully liberalized with significant progress recently observed in the quality of the vessels under Turkish flag complying with Paris Memorandum of Understanding (MOU) requirements. Regarding national cabotage services, the government has included its intention to liberalize national cabotage in the EU accession National Program, after EU membership.

7.19 ***Liberalization of domestic air transport.*** The recent opening of domestic air transportation to competition was followed by the emergence of several private carriers. These carriers provide cheaper transport options in certain high-volume routes with ticket prices reportedly around two thirds cheaper than THY. In 2004, the special process tax (ozel islem vergisi) and education support fund share (egitime katki payi) were eliminated from the airplane ticket prices.

7.3 ENERGY

7.20 ***Government has focused for several years now on the restructuring of the energy sector, working for liberalization and regulation that will lead to more competitive, higher quality supply.*** In EU terms, Turkey is signatory to the Athens Memorandum, 2003 – the Memorandum of Understanding on the Regional Energy Market in South East Europe and its Integration into the European Union Internal Energy Market. While the other regional members signed the Energy Community Treaty in October 2005, Turkey is currently in discussion with the European Community on some aspects of the Treaty, before it considers signing the Treaty. Turkey however, remains committed to implementing the Acquis as demonstrated by the progress – albeit uneven – on its ambitious and complex reform program in energy.

7.21 ***While Turkey has implemented a number of the requirements of the EU and has actually achieved more than is required under the directives, its overall alignment with the EU directives remains uneven across different areas of energy policy.*** The Government has, not allowed retail tariff increases over the past three years. They have partially compensated by increasing the use of hydro generation, the production cost of which is low. Government agencies and offices, notably municipalities, do not pay on time or adequately for their electricity consumption, leading to a further cash flow problem in the electricity sector – the Government is endeavoring to introduce new legislation to curb this problem. It is also hoped that with privatization of distribution, this problem of non-payment will reduce – privatization itself is delayed however, and it will take time to privatize the entire distribution network. There are delays in implementing the balancing market as well. There is a large degree of market opening at present, and Turkey aims to achieve the ambitious target of complete market opening by 2011.

(a) Power

7.22 ***Turkey has opened up the retail electricity market and is in the process of implementing a competitive market for electricity.*** Currently consumers with up to 7.7 GWh of demand are considered "eligible", i.e., they can choose their electricity supplier. Current market opening is estimated at almost 30% of the total Turkish electricity market. A transitional balancing market is also being tested at this stage, and will consist of a bilateral contracts market complemented by a balancing and settlement system. At a later date, a day-ahead market with "spot" prices will be instituted. The market, once it is functional, is expected to provide the necessary price signals for potential new generation.

7.23 ***With the exception of Turkey, by late 2004, all South East Europe power systems were synchronously interconnected.*** The two existing 400 kV transmission lines between Turkey and Bulgaria would allow full integration of Turkey by the end of 2006. In addition to these lines, a new 400 kV line between Turkey and Greece is now under construction, with expected commissioning time is 2007. Turkey is not a member of the Union for the Coordination of Transmission of Electricity in Europe (UCTE), but would like to join. Turkey's interconnection with UCTE is expected to contribute to the security of supply both in the South East Europe region and in Turkey through electricity trade. Turkey is undertaking key investments[84] required for joining UCTE, and detailed technical studies in this regard have been initiated in coordination with UCTE. Turkey is the dominant power producer and consumer in South East Europe – current generation capacity however, is projected as adequate only to meet demand through the next four years, and thus, security of electricity supply beyond 2009/2010 is a key government

[84] The World Bank is financing some of these investments through ongoing loans, NTGP, and ECSEE APL2.

concern. However, given that the electricity market is in transition towards a competitive one, and given that the Government does not want to take on further liabilities with regard to new generation facilities, few alternatives remain. The Bank and Government are beginning work on exploring options for obtaining additional generating capacity in the current situation – a competitive market in transition and delays in privatization of distribution..

7.24 ***Power prices are relatively high in Turkey.*** In 2004, prices were approximately US$0.085/kwh before VAT for households and US$0.095/kwh for industrial consumers. These prices are higher than those faced by medium consumers in all but three of the EU15 countries.[85] Turkey currently has implicit cross-subsidies between regions and also for certain sub-categories of consumers. The Government is contemplating putting in place a transition period – through the use of a tariff equalization methodology which is envisaged for implementation starting in January 2006 – for reducing cross-subsidies and graduating to cost-reflective tariffs over the medium term.

(b) Gas

7.25 ***Reform initiatives are in the right direction but should be fine-tuned.*** The government has addressed the gas sector challenge through a 2001 Natural Gas Market Law[86] and subsequent secondary legislation. Current legislation is compliant with the EU Natural Gas Directive and is designed to open the gas market to competition and, eventually, foster a role for Turkey as a transit country. The Bank's recent policy note on the sector analyzes progress in implementing the law and highlights measures needed to achieve the objectives of the Government in the sector over the medium term.[87] Gas has grown rapidly as a percentage of total primary energy supply in the past decade, now reaching 23 percent. Moving to competitive gas wholesaling within Turkey, which is established policy in the EU, is important for promoting the efficiency of the sector. The policy note highlights the importance of moving to competitive gas wholesaling within Turkey. The note also states that it may not be feasible to transfer BOTAS gas contracts, advocating instead the use of volume release programs, an accepted approach in EU countries. The Law has been amended in June 2005 to allow volume releases as well. The Government has launched a contract/ volume release program for about 64% of existing demand, though the process has been delayed due to the amendment to the Law. Contract release tenders have been realized on November 30, 2005. Bids are currently being evaluated. BOTAS is also in the final stages of separating its transmission, storage

[85] Using medium sized industrial consumers as the guide price. EU15 prices faced by small consumers equal or far exceed US$0.085 in all but Sweden among the EU15.

[86] Natural Gas Market Law - Law No. 4646

[87] World Bank: Turkey: Gas Sector Strategy Note, Report No. 30030-TR, September 2004

and natural gas sales businesses into separate accounting entities, in preparation for eventual unbundling.

7.26 EMRA has also awarded licenses to private investors for building and operating greenfield gas distribution systems in 31 cities over the past two years. While it is still early to comment on the outcome of these privatizations, 20 of these cities are reported to have commenced the use of natural gas.

7.4. COMMON REFORM DIRECTIONS

7.27 ***The long run gains offered by liberalization of infrastructure services offset the costs, but do require thoughtful timing and legislative action to realize.*** The sectors discussed above share the qualities of high cost relative to comparator countries, and relatively low efficiency. The combination, while daunting, does mean that unlike many countries, Turkey has the potential to lower the cost of services while increasing quality and coverage. The means to achieve this – market liberalization to capture the benefits of competition – are embodied in the relevant *acquis* chapters, so Turkey's on-going efforts to achieve that goal are consistent both with growth strategy and accession requirements. Furthermore, the needed actions typically have a low economic cost and offer fiscal relief. However, institutional reform comes with other costs that have slowed implementation. These include shifts in relative power among actors in the sector, with government agencies or state economic enterprises yielding power to more independent private entities (or state entities operating on commercial terms). The use of tariff policy as a social instrument will need to be altered in favor of explicit budgetary provision for social support. Finally, although the EU Acquis and practices allow for financial transactions and other practices through the "services of general economic interest" under well-defined conditions, the government's flexibility in the use of Treasury shares, duty losses, and other *ad hoc* financial transactions with state economic enterprises should continue to be curtailed.

PART C: PROMOTING INCLUSIVE GROWTH

CHAPTER 8. ALIGNMENT WITH EU AGRICULTURAL AND RURAL DEVELOPMENT POLICIES

8.1 ***Agriculture is poised for structural change.*** As Turkey still heavily protects its agriculture and foods sectors, a reduction in protection on the way to the EU would tend to hurt agriculture. However, simulations of the long-term impact of EU accession suggest that the increase in market access into the EU could generate a significant increase in demand that would support significant growth of the agricultural and food sectors in Turkey. Despite this favorable impact, the high share of employment in agriculture is likely to decrease in the future, as in other countries that have liberalized agriculture. The structural changes in production required to boost competitiveness and take advantage of the new environment will also put pressure on rural labor markets. Consequently, one of the key rural development concerns would be whether economic activities in rural areas will be able to absorb labor force leaving the agricultural sector. A main challenge will be to support adjustment to structural changes in agriculture, and promote rural development.

8.2 ***The dual challenges will be to support adjustment to structural changes in agriculture and promote rural development off-farm more widely.*** Strengthening policy coherence will be particularly prominent in the process of EU accession. Particular emphasis will be placed on coherence of instruments and policy objectives between the agricultural and rural development policies, and of their respective institutional and implementation arrangements in line with the CAP.[88] The accession process also implies the EU alignment of Turkey's national rural development policy and objectives. This chapter reviews options that may complement initiatives considered by the Government, including strengthening the coherence and coordination between commodity policies, rural investment policies, and irrigation and drainage policies.

[88] The reformed CAP consists of two pillars, with the rural development representing the 2nd pillar. The 1st pillar concentrates on providing a basic income support to farmers, while the 2nd pillar supports agriculture as a provider of public goods in its environmental and rural functions and rural areas in their development. See: http://www.europa.eu.int/scadplus/leg/en/s04002.htm.

8.1. ALIGNMENT WITH THE EUROPEAN UNION COMMON AGRICULTURAL POLICY (CAP)

(a) Comparative support to Agriculture in Turkey and the EU

8.3 ***Turkey increased the level of producer support but mainly through tariff protection and trade barriers that are reflected in high consumer prices.*** Turkey increased the level of producer support (measured by percent PSE and NAC) since the second half of 1980s (Table 8.1). Continually high import tariffs on agricultural commodities and non-trade barriers have kept agricultural prices high, with 22 percent of consumers' food expenditures an indirect subsidy to agricultural producers—roughly on par with the EU-25.[89]

Table 8.1. Indicators of Support to Agriculture Turkey and EU (1986-2004)

	1986-88	2002-04
Turkey		
Total Support Estimate (TSE)/GDP (%)	3.94	4.40
Percent Producer Support Estimate (PSE) (%)	16	25
Percent Consumer Support Estimate (CSE) (%)	-16	-22
General Services Support Estimate (GSSE) /TSE (%)	9.7	10.8
Nominal Protection Coefficient (NPC)	1.17	1.28
Nominal Assistance Coefficient (NAC)	1.20	1.34
EU		
Total Support Estimate (TSE)/GDP	2.82	1.24
Percent Producer Support Estimate (PSE)	41	34
Percent Consumer Support Estimate (CSE)	-38	-21
General Services Support Estimate (GSSE) /TSE	9.1	8.2
Nominal Protection Coefficient (NPC)	1.80	1.32
Nominal Assistance Coefficient (NAC)	1.71	1.52

Source: OECD (2005)

8.4 ***Support, through direct payments and other programs, remains lower than in the EU.*** With reform of most budgetary subsidies for agricultural outputs and inputs and substitution by the recent Direct Income Support program Turkey's *overall* level of support has been and continues to be about 10-15 percent below that of the EU.[90] The

[89] Non tariff barriers have been particularly distorting in the case of beef imports. Official beef imports have largely ceased owing to an import ban imposed by the government in 1996 on the account of mad cow disease. However, domestic beef production is not enough to meet demand for beef. On the other hand, a considerable cattle import has been made illegally (an estimated 1 million cattle in 2001), which is also of concern for public health. Owing to these illegal imports, beef prices do not increase as much as would be expected. Instead of banning legal beef imports, more targeted measures could be considered—such as establishing a system of cattle registration and traceability. In addition, the high cost of feed due to high import tariffs on maize and interventions of TMO could be adjusted to allow livestock farmers to access to lower cost as well as better livestock suitable feed crops such as soybeans.

[90] Reflected by Nominal Assistance Coefficient (including both market support through tariff protection as well as additional payments made to producers).

difference reflects higher support extended by the EU through non-market subsidy instruments (i.e., budgetary transfers). Support in Turkey for general services, such as research and development, extension and marketing, has been quite volatile with considerable decline in 2004. Since success of alignment efforts with EU will largely depend on upgraded support to farmers on advice on cropping patterns, access to new technologies and better marketing, increased support for general services in agriculture will be quite important for Turkey.

8.5 ***Alignment of market support, through reduced trade protection, with CAP would have an uneven impact by major commodities but would enhance consumers' welfare.*** Producer farm gate and world reference price differentials measured by the NPC are higher for many commodities in Turkey than those of EU (Table 8.2). A simple (static) simulation based on NPC ratios of 2004 show what would be the affect on production values in Turkey of alignment with the current levels of agricultural prices in the EU-25. The biggest reductions in price and in value of production would be seen for potatoes, grapes, sunflower, maize and barley. Beef, milk and wheat would have price reductions as well; whereas prices for sugar beet, poultry and sheep would have to be increased. It is important to note that these price reductions would positively affect consumers' welfare as food expenditures would decline.[91]

Table 8.2 Change in Value of Production with EU CAP Alignment (in %)

	Production Value Share	*Difference in NPC, 2004 (Turkey vs. EU25)*[3]	*Difference in NAC, 2004 (Turkey vs. EU25)*[3]	*Change in Value of Production with Market Protection Alignment*[1]	*Change in Supported Value of Production with Full CAP Alignment*[2]
Wheat	23.3	0.12	-0.18	-10	12
Barley	8.3	0.27	-0.25	-20	15
Maize	3.6	0.37	0.12	-21	-6
Sunflower	2.1	0.29	-0.1	-23	7
Sugar beet	5.4	-0.42	-0.48	16	17
Potatoes	5.9	1.55		-58	
Grapes	11.4	0.51		-33	
Milk	14.2	0.13	0.09	-9	-6
Beef	13.3	0.15	-0.97	-7	45
Poultry	7.1	-0.14	-0.26	8	15
Sheep	5.6	-0.29	-1.05	28	101
Weighted Average of above	100	0.19	-0.27	-12	17

Notes: [1] Assumes full NPC alignment with EU-25; [2] Assumes full NAC alignment with EU-25; [3] in percentage points
Source: OECD (2005) and World Bank staff calculations

[91] These static results do not take into account supply responses and production shifts across agricultural commodities, growth of domestic aggregate demand, nor any kind of general equilibrium effects (see the analysis below). As other studies have shown earlier, for example Nash, et al. (2002), and the modeling exercise conducted for the CEM has confirmed, CAP alignment may have a positive impact on both consumers and farmers in the medium to long term as farmers adjust to the new policies and as real household incomes increase.

8.6 ***On current EU policies, full alignment with CAP would entail an increase in overall support for Turkish agriculture, but subsidies will have to be aligned with a moving CAP landscape.*** Although the market support portion of the agricultural producers' total support would decrease, Turkey's total producer support would increase further for many commodities if it were to become fully aligned with the levels *currently maintained* in the EU-25. Comparing NAC ratios[92] for major commodities, Turkey's producer support for most of the commodities are currently lower than in the EU, and would have to increase, with the exception of maize and milk (Table 8.2). However, because the structure of CAP keeps evolving, it is uncertain that upon accession overall support for Turkish agriculture could in reality increase. In the years ahead, the share of CAP budgetary transfers in total support is unlikely to be growing by enough to fully offset the expected decline in EU agricultural trade protection. In addition, the CAP budgetary support to be received by producers in new EU members is likely to be phased in over long periods, with flexibility for the domestic budgets of Member States to "top-up" CAP transfers.

8.7 ***Full alignment is expected to take a long period, to be phased in after accession, and with a very different CAP landscape.*** First, the levels of NACs in the EU will likely continue its slow decline over the next ten to fifteen years, with NPCs falling further as a result of reduced trade protection, and the share of non-market transfers in total support growing but not by enough to fully offset the fall in NPCs. Secondly, the CAP non-market support levels received by agricultural producers in the recent 10 accession countries are lower than those in the EU-15. The level of support to agricultural producers in the EU-10 are being phased in from 2005-2012. Thus, if the current experience of recent EU accession countries is a good guide, Turkish agricultural producers would likely face a phase-in period as well. In addition, it is very unlikely that, in view of other spending priorities in the budget upon EU accession, Turkey will have much leeway to increase budgetary transfers to agriculture to "top up" CAP payments.

8.8 ***The implications for Turkish agricultural policy during the pre-accession period are fairly clear: market support for a number of commodities has to decrease in general through tariff reduction.*** This will facilitate convergence of such support to EU levels prior to accession and avoid any sharp falls in prices and initial contractions in agricultural income (as have been recently the case in Hungary). At the same time, government budget support for agriculture should be more focused on non-market distorting instruments. This should take the form of maintaining the DIS Program and expanding support for general services and the other non-distorting programs which Turkey is introducing through its draft Framework Agricultural Law. This is discussed in greater detail below.

[92] Ratio between the value of total gross farm receipts including support, and production valued at world market prices without support.

8.9 ***Adjustment of Turkish agriculture to reductions in tariff protection could be facilitated by further improving market access for Turkish exports to the EU during the accession period.*** EU imports of all agriculture products originating from Turkey are tariff free if the value of consignment is below a pre-set entry price. For four different kinds of fruit and nine vegetables, however, this suspension of the MFN tariff is limited to certain calendar periods ranging from 3-8 months depending on the type of the product. Removing such seasonal restrictions would facilitate adjustment towards more dynamic products where Turkey has a comparative advantage.[93]

(b) Impact of Alignment with CAP – General Equilibrium Modeling

8.10 ***The economic impact of Turkey's accession to the EU has been analyzed using the World Bank's global general equilibrium model.*** [94] The model focuses mainly on the agricultural and food sectors, where distortions are highest—except perhaps in services. The model is run in its comparative static version, i.e. with no dynamic aspects and results should be viewed as long-term changes to the steady-state assuming no change in the stock of factors (labor, capital and land) and productivity. Under the model simulation, Turkey eliminates tariffs on imports from the EU and aligns its tariffs with those of the EU, while the EU grants free market access to Turkish agricultural exports. As a result of alignment, the average agricultural tariff in Turkey declines to 6 percent, from 44.2 percent, and to 6.2 percent from 29.4 percent for processed foods. Domestic support—including export subsidies—would more than double under full EU membership, from base levels of $2.2 billion to $4.7 billion.

8.11 ***Accession would lead to some restructuring of output towards agriculture and an increase in net exports.*** The two agricultural and food processing sectors combined would see a slight rise in their share of total value added to 15 percent from an initial value of 14.3 percent, with an average output increase of around 15 percent. Within agriculture, the biggest simulated shift is in cotton, with output increasing by 63 percent and its share in agricultural value added increasing from 7.4 percent to 11.4 percent. Net exports of agricultural and food products are also projected to increase. The total increase in exports of these goods is $4.5 billion, with net exports increasing by $1.8 billion. Although imports would rise substantially because of the large decrease in tariffs, better access to EU agricultural markets would boost exports even more.

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[93] Also some tariff rate quotas, at zero or reduced rates, exist for EU imports originating from Turkey with the full MFN tariff or the specific tariff component only applied for above-quota imports. Turkey in general has managed to fill the quotas over the last years, but in many cases the quotas cannot be completely used owing to inability to meet food safety requirements.

[94] The model was calibrated to the GTAP dataset (release 6.0) with supplemental information on Turkey's domestic protection.. See van der Mensbrugghe (2005) for more details on this model. Prior to Turkey's accession simulation, a "pre-simulation" is run that incorporates known policy commitments—final implementation of the Uruguay Round including the elimination of textile and clothing quotas, EU's expansion to EU25 and China's WTO accession commitments.

8.12 ***Net fiscal savings are also expected as a result of alignment with the CAP.*** Upon EU accession, and barring any transitional clauses or possible limitations mentioned earlier, domestic support to agriculture will be funded from CAP. Tariff revenues, on the other hand, would drop—from an initial level of $1.3 billion to $0.5 billion. Overall, EU accession would translate into an increase in net saving of $1.3 billion, or 0.9 percent of GDP.

8.13 ***Some caveats apply on the simulation results.*** First, the sectoral shifts within agriculture are based on a high degree of factor mobility across sectors. The actual extent to which Turkish farmers can switch across crops—for example from other crops towards cotton—may limit the gains from accession. Second, the gains are being measured against a relatively static policy environment. The model has used 'static' protection rates and does not attempt to predict the evolution of protection over time. For example, should the EU open further its market to non-EU countries (e.g., in its everything-but-arms initiative, where sugar is expected to enter duty- and quota-free by the end of the decade), the impacts of Turkey's accession could be altered. Lastly, the usual caveats regarding the model's assumptions apply here—closure rules, perfect competition and returns to scale, no productivity impacts, etc.

8.2. PROMOTING RURAL DEVELOPMENT AND ITS EUROPEAN UNION ALIGNMENT

(a) Regional Dimensions of Rural Development Investment Patterns

8.14 ***Creating opportunities for off-farm employment and strengthening agricultural productivity are key challenges.*** Turkey still has a considerable share of rural population (35 percent). This sizeable rural population generates pressure on urban areas as a means to rapid migration from rural to urban parts of the country leading to all sorts of problems in urban cities over the last decades. As the share of agricultural GDP and therefore employment declines, Turkey needs to develop of farm income and employment opportunities in rural areas not only to increase economic growth in these areas but also to moderate the pace of rural-urban migration to a more manageable level. Therefore, the industrial and service sectors particularly need to expand further in rural areas, as they have in a number of recent Central and Eastern European (CEE) EU accession countries over the 1990s. At the same time, agricultural productivity has to increase further by adapting to the recent global advances in agricultural technical efficiency.

8.15 ***Appropriately targeted public investment and participatory approaches should receive priority.*** In this regard, government expenditures on agricultural research and extension, as well as infrastructural investments including roads and irrigation need to expand further. Moreover, greater emphasis should be given in the future on participatory approaches, determining service priorities, promoting private sector involvement in and financing of service provision, and expansion of the role of cooperatives, producers union, and other types of farmers organizations. This leads generally to greater co-financing by beneficiaries to infrastructure and other rural investment programs, which may be a sizeable future source of increased investment in the rural sector.

8.16 ***Rural spending at the provincial level tends to reveal that allocations may not very much reflect the regional priorities of the government with the exception of GAP investments.***[95] Although spending figures by seven regions seem to demonstrate that rural spending is higher in general in less developed regions, calculations made at the provincial level tend to indicate the opposite[96]. Correlations between per capita agricultural GDP and per capita rural spending by 81 provinces show positive correlations (average 0.60) meaning more spending is made in provinces where per capita agricultural GDP is higher. Correlations between rural illiteracy levels and per capita rural spending also show that for all of the agencies with the exception of DSI, there is a negative correlation between the two: agencies' rural per capita spending is lower in provinces where rural illiteracy levels are high.

8.17 ***Project prioritization would deserve greater attention.*** Regional spending for each agency is diverse due to many reasons, particularly the location of natural resources (forests in the case of MOEF and water resources in the case of DSI). For example DSI allocates its agricultural spending based on ongoing irrigation projects in 26 different areas. However, funding amounts are insufficient to complete the current projects and there is no clear plan for prioritization of project implementation. Therefore, many areas that are in urgent need wait for a long time to receive enough funding to be completed. Another essential improvement for rural expenditures is to adequately prioritize the regional as well as "by project" investment needs. Dormant projects have to be eliminated from the investment program and projects that are close to completion must be given priority. For poverty alleviation purposes, less developed provinces mainly in the regions of East Anatolia, South East Anatolia and the Black Sea should receive greater shares of government investment expenditures.

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[95] Priority development provinces are determined but by the decisions of the Council of Ministers on the Implementation, Coordination and Monitoring of the Annual Programs issued each year. The latest program (2005) selected 49 provinces out of 81 provinces as priority provinces that are located mostly in the East, South East and Black Sea regions and which have in general the lowest per capita income. GAP is the biggest regional integrated project that has a significant share of investments. Approximately 15 percent of rural budget expenditures are allocated to GAP projects (excluding energy) in 2002. As of the end of 2001, 10.8 quadrillion TL have been spent for GAP, reaching a cash realization ratio of 48.1percent.

[96] The sources for data gathered and methodologies used for this analysis are elaborated on in the recent World Bank Report 'Turkey: Policy and Investment Priorities for Agricultural and Rural Development", 2005. The types of rural expenditures considered included: agriculture - including farmer support services such as extension and research, animal health, plant protection; forestry, erosion control, and other agri-environment programs; and, irrigation and other rural infrastructure - rural roads, water supply and sanitation, electricity.

(b) Using EU Pre-Accession Funds for Rural Development

8.18 ***The scope for using EU funds during accession could be significant.*** The rural development instrument of regional development policy (IPARD) serves as the framework for supporting sustainable agricultural and rural development in EU applicant countries during the pre-accession period. It aims to solve problems affecting the long-term adjustment of the agricultural sector and rural areas, to help implement the Community *acquis* in matters of the CAP and related policies. Subject to ex-post checks carried out by the Commission, the national authorities of the beneficiary countries are entirely responsible for managing funds. This system has a positive impact on the absorption capacity of the rural development funds after accession as this acquired experience is intended to prepare the future Member States for eventual management of structural fund and cohesion fund programs. All the recent accession countries, without exception, have been able to take up this challenge successfully. Policy priorities in order to create absorptive capacity for structural fund programs and for adjustment of agricultural sector regulations and policies to EU CAP requirements are reviewed below and summarized in the policy table at the beginning of the study.

8.19 ***In order to be able to be eligible for IPARD funds, Turkey needs to complete three main activities:***

- ***Rural development strategy:*** A framework for rural development projects has to be developed by identifying priorities and measures for rural areas and ensuring harmonization with the EU's rural development policies. Efforts are under way to draw up the strategy, and the strategy is being finalized.
- ***An IPARD plan:*** This is to be a multi-year programming document which is based on the rural development strategy. The IPARD plan lays out the mix of prioritized activities drawn from the list of measures eligible for support.
- ***Rural Development Agency (Paying and Implementation):*** As payments under IPARD are to take place in a fully decentralized system (ex-ante controls), the new agency with all its branches has to be set up and proceed through a lengthy accreditation process. The agency can delegate some of its responsibilities to Special Provincial Administrations (SPAs, of which there are 81). In this process, Turkey should initially target a limited number of areas for developing a functioning administrative structure, and then accelerate the process to improve the system subsequently in more challenging rural areas.

8.20 ***The capacity of SPAs to identify, plan, and execute agricultural and food sector investment programs needs to be strengthened.*** Turkey also has to rapidly develop key acquis related food safety and regulatory functions such as phyto-sanitary inspection and control, livestock and dairy inventorization and traceability, agro-chemical control and organic certification, so that investments that need to comply with food safety measures, can be made eligible for the pre-accession funds.

8.21 ***Rural development policies that largely consist of support for non-farming activities in the services and industry sectors should be given particular attention***. This has been demonstrated by the recent experience of Poland and Hungary. Maximum attention should be given to cooperation between agencies since rural development is multi-dimensional and covers various sectors. Examples of convergence in countries that heavily used structural funds have also shown that investment strategies need to be determined by careful analysis of regional specificities, bottlenecks and potential competitive advantages.

8.22 ***Country examples suggest that regional policies should be primarily focused on promoting efficiency, with growth oriented measures ensuring diffusion of convergence across regions.*** Also a number of studies have found that regional funding of essential infrastructure (transport, communication, power, water, education) is more effective than subsidies allocated to small businesses. As for the institutional arrangements, structural funds should be integrated into the government's overall strategy and public resource management process.

8.23 ***Taking advantage of structural funds also poses a co-financing challenge.*** The availability of sufficient beneficiary contributions (at least 25-50 percent) for rural development programs linked to structural funds can be a very important obstacle for investments in rural areas. Increasing access to finance in rural areas will key for increased use of such funds.

CHAPTER 9. ENHANCING POLICIES FOR SOCIAL COHESION

9.1 ***Ensuring sustained and inclusive growth is an important challenge for Turkey in view of the existing important social and regional gaps and the potential for the EU accession process to create "winners", but also some "losers".*** Although reform is underway to define a more systematic approach to start closing the existing gaps, an integrated strategy will need to be formulated with a strong dimension on policies for social cohesion. The capacity of the social security system to contribute/strengthen social cohesion is impaired by several factors: it does not cover the entire population; it lacks financial stability, with the largest share of funds going to pensions; the presence of a large informal sector; and administrative and management problems which have adverse effects on the effectiveness in the delivery of services. This chapter provides analytical underpinnings in the key areas of social inclusion and health care, with emphasis on policies to improve efficiency and ensure financial sustainability.

9.1. SOCIAL INCLUSION

9.2 ***A wide range of policies and programs can have an important positive impact upon social inclusion and cohesion.*** Notable amongst these are basic and secondary education policies (discussed in the recent World Bank report on education) which extend high quality education at an affordable price to the entire citizenry. Tertiary education is more complex because of its higher unit costs, and more limited coverage. UHI, as discussed already, if implemented correctly, will be a powerful tool of social cohesion. However, a number of other measures are necessary. The key ones are highlighted below.

9.3 ***Poverty monitoring:*** Maintain the excellent work on poverty monitoring under the State Institute of Statistics (DIE) based upon annual household income and consumption expenditure surveys (HICES). Strengthen the poverty mapping function.

9.4 ***Conditional cash transfer (CCT)***: Maintain and strengthen the CCT which is targeted towards the poorest 6 percent of children (with the benefit paid to the mothers) which helps families to maintain the poorest children in school and obtain adequate preventive health services. This program is already reaching 2.0 million children and is administered by the General Directorate of Social Assistance and Solidarity (SYDGM) through its 931 associated foundations throughout the country. The proxy means test for this program was updated in 2005 according to the 2003 HICES. The proxy means test for CCT will be systematically updated based upon the latest HICES, and in this manner strengthened so that it can be used for the determination of eligibility for other government programs (such as UHI premia paid for by the state) by adjusting the cut-off point accordingly.

9.5 ***Social Services****:* A wide range of agencies including municipalities, the Social Services & Child Protection Organization (SHCEK) and the SYDGM are providing social services. Unfortunately there is no integrating framework, and both problems of duplication and inadequate service provision apply, although the related agencies are doing their best to coordinate. There is a need to develop an integrated social policy under one lead ministry, improve the monitoring and evaluation of social services, and then expand cost-effective services to underserved population groups, although it would be very appropriate for the SYDGM to remain as an executive agency making payments and providing services but not under the direct control of the policy-making ministry..

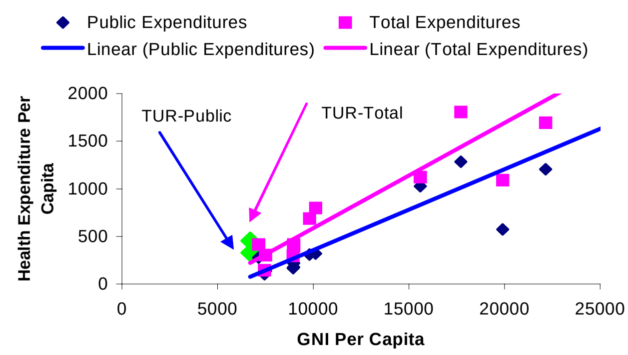
9.6 ***Youth policy***: With. youth aged under 25 accounting for 50 percent of the total population, youth are a particularly important population group to target as they represent nothing less than the future social and human capital of the country. It is urgent to give more attention to the issues of youth empowerment and inclusion, together with specific programs .to overcome barriers to youth employment (youth unemployment is 2.5 times the national average). Inter alia, this process would be enhanced through the development of a national youth policy and providing significantly more resources to youth programs.

9.7 ***Gender***: Whilst Turkey has made good progress in addressing some gender inequities, and both primary and secondary school enrollment rates are converging for the two genders, there is still more to be done in terms of promoting and supporting female employment, reducing the pay gap and in general integrating women as full equal partners in society.

9.2. MANAGING THE HEALTH CARE SYSTEM

9.8 ***Health care expenditures and outcomes are unevenly distributed.*** Turkey spends around 6.7 percent of its Gross National Income (GNI) on health, of which public expenditures account for about 70 percent.[97] Per capita expenditure is relatively higher than in countries with similar income levels (Figure 9.1), while the health system fails to reach the poor and vulnerable sections of society. Expenditures favor Turkey's Central and Mediterranean regions over other parts of the country and East and Southeast Turkey receiving less than the proportionate share of spending given their population. The distribution of health benefits to different income quintiles shows a significant bias towards the top two quintiles, who consume about 52 percent more health care per capita relative to the bottom two quintiles.

Fig. 9.1 Health Expenditure and GNI Per Capita Turkey and Comparator Countries



9.9 ***There is ample room for improving health care outcomes and for efficiency gains in public expenditure.*** Despite spending levels on the high end of comparators, Turkey faces an unacceptably high burden of ill health and ranks far behind most middle-income countries in terms of the health status of its people. The reasons for such low outcomes are many and varied. There are gaps in nutrition, housing, access to clean water and satisfactory sanitation, and education, especially of girls and women – all of which are widely recognized to be powerful determinants of good health – that adversely affect health status. On the financing side, besides the fact that there are multiple problems with mobilization of resources, the available resources are not allocated efficiently and equitably. A significant proportion of the population has little or no financial protection, and despite support from special funds and programs like the Social Assistance Fund and

[97] Public expenditures on health consist of expenditures incurred by the Ministry of Health, General Directorate of Coastal Health Services, Universities, Social Solidarity Fund, other Ministries and agencies, local governments, state enterprises, civil servants, and social security institutions: Sosyal Sigortalar Kurumu (SSK), Emekli Sandigi and Bagkur. Private expenditures on health consist of out-of-pocket treatment and pharmaceutical expenditures incurred by individuals and households, and by companies and individuals contributing to private insurance schemes. Social health insurance – offered by SSK, BagKur and Emekli Sandigi – accounts for almost 66 percent of all public expenditures on health, equivalent to about 12,875 trillion liras in 2004, with the balance (6,582 trillion liras in 2004) coming from the central government budget. A little over 53 percent of all public expenditures on health take place on care provided by hospitals, followed by 30 percent on the provision of pharmaceuticals and medical goods and 8.5 percent on outpatient care. Source: World Bank calculations, based on MOF/MOH/MOLSS data, reorganized and presented in the NHA2000 format

the Green Card, in practice the disadvantaged groups are not targeted effectively. In addition, there are multiple payers for same or similar services, and the institution of revolving funds – which allow health providers to accept user charges and account for them outside the budgetary flow of funds – introduces a variety of perverse incentives for providers and further constrains access to health services for consumers. Public provision of health is characterized by poor incentives for managers and providers alike, leaving them open and vulnerable to alternative sources of income to augment their meager salaries. Like financing, the delivery of health care is also fragmented, and there is little continuity in the different levels of care. Clinical effectiveness of existing medical interventions and treatment protocols is not always tested and attention to quality and effectiveness of care is uneven. The private sector is growing, but its full potential is not fully realized and their role and responsibilities not adequately defined.

9.10 ***Systemic and comprehensive reforms in the health sector are being undertaken.*** Key elements of the proposed reforms that aim at improving equity and access to health services are the introduction of universal health insurance and the creation of a health insurance fund that would integrate all functions and premium collections related to health in the existing insurance agencies such as SSK (Sosyal Sigortalar Kurumu), BagKur and Emekli Sandigi. The health insurance fund would combine all financial flows of fund in the health sector, including budgetary support to MOH (except for public health care activities), financial outlays for the existing Green Card program, and health expenditures of civil servants. Based on the principles of solidarity and risk pooling, all citizens of the country are proposed to be covered under universal health insurance, with the state making premium contributions on behalf of the indigent and others unable to do so on their own behalf.

9.11 ***Providing adequate financial protection for health care to the entire population is a key challenge.*** The present system of insurance leaves many without any coverage and with inadequate coverage for many who are nominally covered. Additionally, there are many who enjoy multiple sources of coverage, either by design or by circumstances. There is also little doubt that the different health insurances being offered through SSK, Bagkur and Emekli Sandigi, and the coverage provided to civil servants and welfare programs like the Green Card should – in the interest of efficiency, risk-pooling and consolidation of financing – be combined into one compulsory universal health insurance system.

9.12 ***Unless it is accompanied by cost-reduction and efficiency enhancing measures, the introduction of UHI could lead to higher levels of public expenditure on health in the short run and jeopardize the fiscal sustainability of the system.*** Public expenditure may increase not only because the state will have to bear the health insurance expenditures of those hitherto uninsured, but also due to the induction impact on account of changes in utilization of health services by the already insured as they adjust to new boundaries of coverage, and the utilization patterns of the newly insured. In order for the system to be fiscally sustainable, therefore, the introduction of universal health insurance needs to be accompanied by system-wide efficiency changes that will contain health costs and compensate for the additional expenditures associated with extending financial protection to all segments of the population. The proposed introduction of universal health insurance has already triggered a number of reform measures in the health sector in Turkey, and the emphasis at this point needs to be not only on sustaining this momentum and extending it to other areas not included so far, but increasingly on ensuring that the desired access and efficiency outcomes are achieved without any increase in public expenditures on health. The more important of these focus areas are elaborated below.

(a) Consolidating hospitals and improving efficiency

9.13 ***While some gains in efficiency can be brought about simply by consolidating and reducing the number of hospital beds in many provinces, further gains will come about only by improving efficiency in the use of hospital resources and overall management and accountability.*** A large number of hospitals continue to be underutilized, and huge variations still exist in hospital occupancy rates among provinces. Many MOH hospitals are too small in size to allow for efficient operation and provision of care, and have significantly lower utilization rates compared to SSK and University hospitals. In addition, hospital managers enjoy very limited administrative and financial autonomy, and have very few incentives to adopt efficiency-enhancing measures. The proposed introduction of universal health insurance provides a good opportunity to further strengthen the gains from the merger of MOH and SSK hospitals under MOH ownership and management. However, the separation of provision and financing provides an opportunity to introduce innovative methods in management of health facilities, which can be achieved by granting financial and administrative autonomy to public hospitals. The introduction of hospital autonomy will require appropriate legislation that will allow for public assets to be managed outside the direct purview of the government, and related laws and regulation would need to be amended in order to facilitate the transformation of MOH and SSK facilities to autonomous bodies.

(b) Strengthening delivery of health services

9.14 ***The introduction of universal health insurance also provides an opportunity to initiate measures to improve delivery of health services.*** This process has also started with the piloting of the family medicine system, which is aimed at shifting the emphasis from treatment of the sick to health promotion and prevention of illness. The family medicine system will bring the physician and family members into closer and more personal contact, enabling the physician to play an important role in the family's health and prevention of illness. Under the family medicine system, simple and routine diagnostic services and consultations could be provided under a single-window and common illnesses could be treated across a broad spectrum of medicine domains, including internal medicine, gynecology and pediatrics. Family medicine places special emphasis on continuity of care and on quality of health services, and integrates preventive health services with basic health services and provides the full package under one window. The family medicine system has the potential for the strengthening of the patient referral system as well.

(c) Reforms in provider payment mechanisms

9.15 ***Changes in provider payment systems and incentives for physicians to provide quality care at lowest costs are required.*** Some of these changes are already being planned, and a system of paying family physicians on the basis of capitation is being worked out.[98] Physicians participating in this scheme bear most risks of treating a patient, and therefore are likely to be conservative in the amount of health care they provide. Such a system would need to be extended to cover all outpatient care as family medicine is scaled up from the Duzce pilot.

9.16 ***Prospective payment mechanisms introduced at the hospital level would provide incentives to hospitals to contain costs.*** Prospective payment mechanisms rely on the fact that services associated with a particular treatment are reasonably predictable and can be bundled into a group to which a monetary value can be attached. The hospital then gets reimbursed according to a pre-fixed rate per bundle. Such payment mechanisms do not encourage excessive use, since the hospital can conceivably make a profit (or a surplus) by being careful about inputs and hospital lengths of stay. One of the most widely-known prospective payment systems is the Diagnosis Related Group (DRG), developed to classify treatments according to the resource costs of its treatment. To be certain, a DRG-based system by itself will not necessarily promote efficient use of resources. Hospital care providers and managers need the flexibility and tools to actively manage their resources and redirect their use, which will ensure that cost-savings in treatment of one case are passed through the entire system.

(d) Containing outpatient care provided by hospitals

9.17 ***A rules-based approach would be needed to contain costs.*** A large number of outpatient services in Turkey are provided in hospitals, accounting for almost 43 percent of total costs of outpatient services. Outpatient services provided in hospitals cost significantly more than outpatient services provided in outpatient clinics, and it is imperative that the introduction of universal health insurance and family medicine be

[98] Physicians paid on the basis of a capitation fee per enrollee receive a fixed amount per enrollee regardless of the type and extent of treatment sought.

accompanied by a significant reduction in number of outpatient visits in hospitals that are paid out of the health insurance fund. This can be managed by establishing clear and transparent rules restricting reimbursement by the health fund of outpatient treatment carried out in hospitals.

(e) Managing pharmaceutical costs

9.18 ***Containing expenditures on drugs is a key challenge.*** Drugs are perhaps the single largest cost driver in almost all healthcare systems, and have been the most dynamically growing element in overall costs of healthcare services in recent years. According to new data released by OECD, spending on pharmaceuticals across OECD countries has increased by an average of 32 percent in real terms since 1998, reaching more than US $450 billion in 2003. Growth in drug spending has outpaced total health expenditure in most OECD countries, and Turkey is no exception. Expenditure on pharmaceutical products constitutes a significant proportion of total expenditures on health in Turkey, accounting for almost half of all SSK, Emekli Sandigi and Bagkur spending on health. While pharmaceutical prices have increased broadly in line with inflation, there has been a much larger change in consumption levels, including subtle changes in consumption in favor of newer and more expensive drugs.[99]

9.19 ***One of the reasons why Turkey spends a huge amount on drugs and pharmaceutical products is that most of the insured population is insensitive to pharmaceutical prices.*** Out-of-pocket payments for medicines constituting between 10 and 20 percent of total medicine bill of the insured.[100] In addition to price controls, managing consumption of pharmaceuticals is critical in order to contain expenditures on drugs. Many countries have successfully adopted demand-side measures of controlling consumption, and cost-sharing has proved to be the most effective such measure.[101] The consumption of pharmaceutical products among the insured is actually not low by international standards, and there is a strong scope for cost containment if indiscriminate consumption can be curbed.

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[99] Between the years 2000 and 2001, for example, the proportion of drugs consumed priced at half million TL or less decreased slightly from 34 percent to 30 percent, while the proportion of drugs consumed priced at 2 million TL or more increased from 34 percent to 47 percent.

[100] Indeed, the high percentage of pharmaceutical expenditures in terms of overall health expenditures is as much a reflection of low overall expenditures on health as it is of high expenditures on drugs.

[101] In the Netherlands, for example, the introduction of co-payments on prescribed pharmaceuticals (a fixed amount per prescription) led to substantial decrease in the total number of prescriptions. In Germany, drug cost-containment measures take the form of cost-sharing, prescription limitations, reference prices and the pharmaceutical spending cap that makes physicians' associations liable for any overspending with no upper limit. These measures led to substantive decreases in pharmaceutical expenditures for social health insurance, mainly attributable to price reductions, changes in physicians' prescribing behavior resulting in a reduced number of prescriptions by 11.2 percent and increased prescriptions for generics. The French government imposes a fine on pharmaceutical companies if pharmaceutical expenditures surpass budget ceilings either due to price or quantity increases.

9.20 ***Reforms should be phased in with appropriate sequencing.*** While all of the above measures are critical to ensure improvements in access, equity and efficiency, it is critical that utmost attention is paid to the sequencing of the above reforms so that the process is seamless and does not lose effectiveness and credibility in the process of its implementation.

Annex 1 – Statistical Tables

Turkey: Table A1: Selected Macroeconomic Indicators

	Actual					
	1999	**2000**	**2001**	**2002**	**2003**	**2004**
GNP Growth	-6.1	6.3	-9.5	7.9	5.9	9.9
Consumption	-1.7	6.3	-9.1	2.5	5.6	9.0
Public	6.5	7.1	-8.5	5.4	-2.4	0.5
Private	-2.6	6.2	-9.2	2.1	6.6	10.1
Investment	-15.7	16.9	-31.5	-1.1	10.0	32.4
Stock 2/	2.0	1.1	-4.0	7.1	3.0	1.1
External Balance2/	-0.9	-3.0	12.4	-0.9	-3.1	-4.9
Exports	-7.0	19.2	7.4	11.1	16.0	12.5
Imports	-3.7	25.4	-24.8	15.8	27.1	24.7
Unemployment Rate	7.7	6.5	8.4	10.3	10.5	10.3
CPI Inflation (Dec-Dec)	68.8	39.0	68.5	29.7	18.4	9.3
Nominal Interest Rate	106.2	38.0	99.1	63.5	44.1	24.9
Real ex-ante Interest Rate 3/	32.0	-9.5	35.5	30.3	30.2	14.2
Current account balance (% of GNP)	-0.7	-4.9	2.3	-0.8	-3.4	-5.2
Current account balance (billion $)	-1.3	-9.8	3.4	-1.5	-8.0	-15.7
Exports (fob)	28.8	30.7	34.4	40.1	51.2	67.0
Imports(fob)	-39.0	-52.7	-38.1	-47.4	-65.2	-90.9
Capital Account (billion $)	4.8	9.6	-14.6	1.2	7.1	17.2
FDI	0.1	0.1	2.8	0.9	1.3	2.0
Overall balance (billion $) 4/	5.2	-3.0	-12.9	-0.2	4.1	4.3

Source: Government, IMF and WB
1/ IMF and WB estimates.
2/ Contribution to GDP growth
3/Average of monthly nominal interest rate divided by 12-month ahead inflation
4/Errors and omissions included

Turkey: Table A2: Public Sector Balances 1999 - 2004

	1999	2000	2001	2002	2003	2004
Consolidated General Government (% of GDP) 1/						
Total Revenues	34.4	37.9	40.0	37.8	39.6	39.9
Taxes 2/	21.8	24.4	25.6	22.2	23.6	23.6
Other Revenues	12.7	13.6	14.3	15.6	16.0	16.4
Total Expenditures	48.6	50.0	59.4	51.7	49.8	46.1
Primary Expenditures	34.1	33.0	34.0	33.5	33.0	32.6
Interest Expenditures	14.6	17.0	25.4	18.1	16.8	13.5
Primary Balance	-0.4	4.2	4.9	2.9	5.3	5.7
Overall Balance	14.2	12.1	19.4	13.8	10.2	6.1
Total Public Sector (% of GNP)						
Primary Balance	-2.4	2.6	5.1	4.0	6.0	6.8
PSBR	19.6	17.1	13.5	9.1	4.8	3.5
Memo						
Gross Public Debt (% of GNP)		68.2	107.5	93.6	83.4	77.4
Domestic		43.1	71.1	56.3	56.4	54.5
External		25.1	36.4	37.3	26.9	22.9

Source: SPO,IMF, Treasury and World Bank
1/ Excluding Regulatory and Supervisory Institutions
2/ Tax rebates excluding

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MAP SECTION