

**TAXATION OF MOBILE COMMUNICATIONS:
THE EU EXAMPLE & TURKEY**

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I. EXECUTIVE SUMMARY

One of the few areas where Turkey by far leads the world is the taxes levied on mobile communications services. The aggregate rate of Value Added Tax, Special Communications Tax as well as the Treasury tax imposed on these services in our country reaches 58%. Out of a 100 YTL invoice issued to a retail consumer, 42 YTL is paid to the Treasury. In 50 developing countries, the average of the taxes imposed amounts to 17.1%, whereas in Turkey, taxes more than three times this rate are imposed.

It is true that such heavy taxation of mobile communications increases Turkey's tax revenues. However, such contribution to tax revenues - which is disproportionate to the global averages - has inevitable and negative consequences in a number of areas starting with EU harmonization. Indeed, prevailing taxation rules in mobile communications sector are incompatible with Turkey's EU harmonization obligations.

Harmonization with the EU

In the EU Member States, public policies related to the taxation of the communications sector have taken into consideration the importance of the sector and the sector has not been subjected to taxation any differently than other economic activities. In EU countries, the mobile communications sector is essentially taxed by way of the Value Added Tax (VAT). With the exception of Greece and Italy, there are no other levies that increase the tax burden of the sector. Moreover, in nearly all states which became EU members as a result of the two most recent enlargements in May 2004 and January 2007 and are more akin to Turkey in terms of their level of economic development and national income, there has been a tendency to stabilize or reduce the burden of taxation.

High tax rates imposed on mobile communications stand out as an obstacle in front of Turkey's harmonization with the EU. As a matter of fact, this matter is mentioned in the latest annual Progress Report which reviews Turkey's compliance with the *acquis communautaire* according to the negotiation chapters. As part of the evaluations concerning the *Negotiation Chapter 10 on information society and the media*, it is stated that; "Equally important is the implementation of universal service obligations in compliance with the EU Directive, the licensing regime, including addressing the problem of high communications taxes imposed on operators which are detrimental to market entry, and the effective independence of regulatory body from Government (which remains an important shareholder in several operators)."

On the other hand, the taxation regime concerning mobile operators in Turkey violates the EU's principle of taxes not being nondiscriminatory between businesses operating in the same sector. In Turkey, there are certain discrepancies in terms of the tax regulations imposed on mobile telephony operators and fixed-line operators. For legislative alignment

in the telecommunications sector, taxes imposed on mobile operators and fixed-line operators will have to be standardized. For this purpose, Special Communications Tax rates should be equalized, and Treasury tax should be abolished.

In addition, the heavy tax burden of mobile communications has a number of negative economic consequences. This is detrimental to both the productivity and growth potential of the Turkish economy.

Impact on Sectoral Growth

High rate of taxes in the mobile communications sector hinders the sector's growth. Ever since the mobile communications services were launched in Turkey in 1995, the mobile communications sector has grown in relative terms, and its contribution to the Turkish economy has increased. Today, however the heavy tax burden poses a structural obstacle to further growth. So much so that even in countries that were far behind Turkey a couple of years ago, sectoral growth and penetration has surpassed that in Turkey. Penetration of mobile communications services in Turkey reached 82% at the end of 2007. However, this rate is only higher than the one in Albania, Byelorussia, Bosnia, Moldova, and Macedonia among all European States. Whereas, Turkey is ahead of these countries in terms of income per capita, and furthermore, these services were introduced to the market much earlier in Turkey. The penetration rate is higher even in Bulgaria, Romania, Russia, and Ukraine, who are behind Turkey in terms of income per capita. This primarily results from the heavy tax burden on the sector.

Impact on Economic Growth

The heavy tax burden on mobile telecommunications services also has a negative impact on the growth of the Turkish economy. In fact, several economic studies indicate the existence of a correlation between mobile communications services and economic growth. It is estimated that each 10% growth in mobile penetration in developing countries leads to 1.2% increase in the GDP. This is due to the positive impact of the penetration of communications services on economic growth. In other words, improved communications pave the way towards a more efficient and prosperous economy. Similarly, the slowdown in the penetration of mobile telecommunications services means a reduction in the economy's growth potential.

As a matter of fact, the importance of the telecom sector is also mentioned in this year's report prepared by the "Commission on Growth and Development", which was setup in order to prepare a package of basic economic recommendations for the countries to grow in a stable manner in the light of globalization, and whose members include Nobel laureate economists Robert Solow and Michael Spence, former Mexican President Ernesto Zedillo, former US Secretary of the Treasury Robert Rubin, and UNDP Administrator Kemal

Derviş¹. The report states that the pricing of the telecommunications services is of particular importance for the purpose of promoting the growth.

Impact on Income Distribution

The income distribution is also undermined by such taxation policies. As a result of the high rates of communication taxes in Turkey, the ratio allocated for the communications services within total household expenditures is 4.18% which is one fourth higher than compared to EU Member States.

In case the taxes imposed on mobile communications sector in Turkey are decreased to 20% which is the average rate in Europe, the reduction in cost will be reflected on consumers through lower prices. Such a reduction would enable families in Turkey to increase the budget they allocate for family healthcare, for instance, by one fourth without the need to make additional savings

It is known that one of the fundamental factors that affect income distribution is equal opportunities. Nowadays, internet access has become crucial for creating equal opportunities. Indeed, through a variety of insights it offers, internet contributes to the creation of equal opportunities in many areas from education to culture, consumption to public services. But, as a result of the public policies enforced in Turkey, broadband internet access remains significantly behind European countries. New technologies that will eliminate this gap will be implemented in the upcoming years, notably 3rd generation mobile communications or UMTS technologies. In any case, it will be necessary to make use of mobile technologies in order to make broadband internet access more widespread in Turkey. However, the taxation of mobile communications services also in this area stands out as a significant obstacle. Data communication is taxed in a similar way to voice communication and is subject to a heavy tax burden. Therefore, eliminating the lack of progress in the use of broadband internet in Turkey through a more widespread access to broadband can only be possible by reducing the tax burden on the mobile communications sector.

Conclusion

Mobile communications services are subject to heavy taxes in Turkey. Turkey, by far, ranks the first in the world in respect of the taxes imposed on such services. In 2007, the contribution of mobile operators to the public budget only through the Special Communications Tax was 4.2 billion YTL. Naturally, this contribution has a positive effect on Turkey's fiscal balances. However, what is frequently disregarded is that, this tax burden has negative effects on many other areas of the economy. This report aims to

¹ "Commission on Growth and Development : the growth report", (2006)

clarify these negative effects. Within this framework, it can be seen that the heavy taxation on the mobile communications sector;

- Is incompatible with Turkey's obligations for harmonization with the EU,
- Slows down the growth rate of the Turkish economy,
- Reduces direct and indirect contributions of the sector to the Turkish economy,
- Reduces general productivity of the economy,
- Increases income disparity, and
- Will hinder the penetration of mobile technologies and therefore by undermining the potential to significantly increase broadband internet access will impair the objective to ensure equal opportunities.

Consequently, although the gradual elimination of Special Communications Tax may give rise to the loss of tax revenues in the short term, from the standpoint of general economic balances, it should be considered as a useful measure. Furthermore, the Special Communications Tax was imposed only as a temporary tax following the earthquake in 1999. In order for this tax to be described as "temporary", it should have been abolished by now. Otherwise, the predictability and credibility of Turkey's tax policies, which are extremely significant for investment decisions and the inflow of foreign direct investments, may be undermined.

INTRODUCTION

One of the few areas where Turkey by far leads the world is the taxes levied on mobile communications services. The aggregate rate of Value Added Tax, Special Communications Tax imposed on these services as well as the Treasury share reaches 58%. Out of a 100 YTL invoice issued to a retail consumer, 42 YTL is paid to the Treasury. There is an over-taxation in this sector due to the Special Communications Tax corresponding to a levy of 25% which was implemented on a temporary basis following the earthquake disaster in 1999, but has become permanent since then as well as the Treasury share of 15% imposed on the sector. This is most dramatically demonstrated in the table below (Table 1) which is taken from a report prepared by the international auditing and advisory company Deloitte² focusing on the taxation in the mobile communications sector in 2006. This table shows the tax burden as a percentage of total mobile service cost. As it may be observed, Uganda and Brazil follow Turkey in terms of the total tax burden. In 50 developing countries, the average of the taxes imposed amounts to 17.1%, whereas in Turkey, taxes more than three times this rate are imposed.

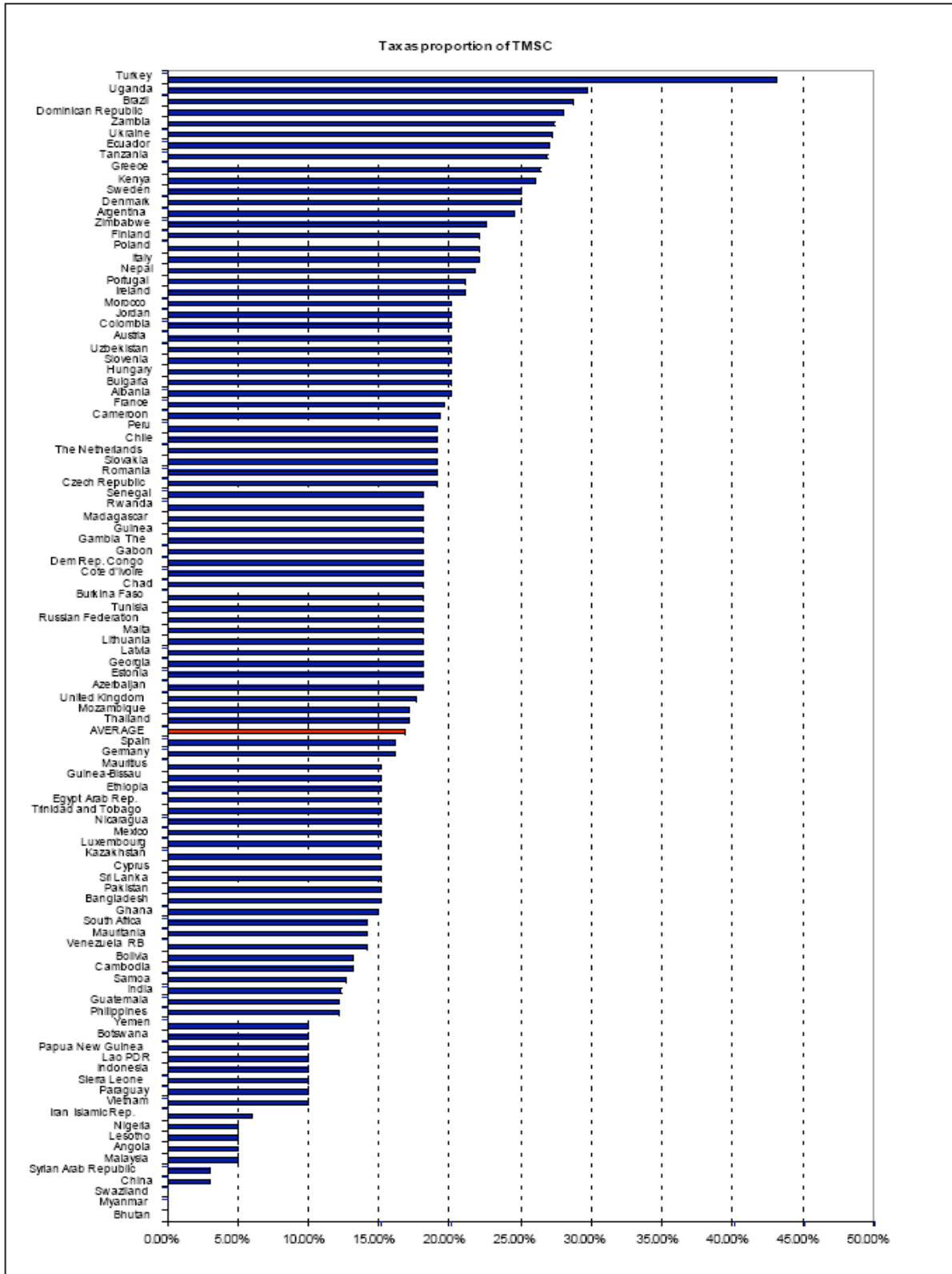
It is true that such heavy taxation of mobile communications increases Turkey's tax revenues. However, such a disproportionately high contribution in terms of global averages to tax revenues has inevitable and negative consequences in a number of areas starting with EU harmonization. Indeed, prevailing taxation rules in mobile communications sector are incompatible with Turkey's obligations from the standpoint of EU harmonization. In addition, the heavy tax burden imposed on this sector has negative consequences for the economy in particular as regards to productivity and growth. Furthermore, the income distribution is also negatively affected.

This analysis focuses on the negative impact arising in different areas of the tax regime in mobile communications sector. The first section of the analysis deals with the communications sector in the EU. Generally, a major importance is placed on the communications sector in the EU. In fact, EU's goal of becoming the world's most competitive economy in 2010, put into effect with the Lisbon Strategy, relies on the protection and development of the dynamism of the communications sector. Public policies affecting the communications sector, including tax policy, are shaped in accordance with this objective.

In the second section, an assessment is made regarding Turkey's alignment with the EU in the mobile communications sector, as covered under the negotiations chapter on media and information society. In the following sections, the impact of the tax regime on sectoral growth, economic growth and income distribution are evaluated.

² Deloitte (2007), "Global Mobile Tax Review 2006-2007". www.gsmworld.com/documents/tax/tax_report.pdf

Table 1: Tax as a percentage of Total Mobile Service Cost



Source: Deloitte (2007), "Global Mobile Tax Review"

I. THE MOBILE COMMUNICATIONS SECTOR AND TAXATION IN THE EUROPEAN UNION

Information technologies and the communications sector take priority in EU's Lisbon strategy

A great importance is placed on the development of the telecommunications sector in the European Union. Information technologies enjoy a priority status in the Lisbon Strategy which was put into effect in order to transform the EU into the world's most competitive and dynamic economy in 2010. The strategy for 2010 that was drawn by the EU consists of public policies spurring investments in information technologies and the development of these sectors. It is believed that the Union will thus be able to reach its Lisbon objectives more easily. In fact, while explaining the relation between information technologies and the objectives of the Union's Lisbon Strategy as well as the EU's economic performance³, the European Commission notes that the use of information technologies,

- Increases productivity and creates new markets,
- Reduces administrative burdens weighing on the business world,
- Renders public administration more effective and, in addition,
- Investment in information technologies supports innovation.

The communications sector constituted 2% of EU's national product and gave rise to 12% of the increase in productivity.

Therefore, EU's public policies are targeted to ensure that the communications sector gains dynamism and productivity.

The same conditions are also valid for the taxation policy.

Under the chapter of information technologies, the communications sector occupies an important position. In 2007, communications services in EU nations reached a market size of 300 billion Euros. In this regard, the sector makes up 2% of EU's national product. However, of even greater significance is the contribution that the telecommunications sector provides to the general economy. Since this sector constitutes a fundamental input in economic activity, its performance closely affects that of an array of other sectors as well. Furthermore, penetration of communications services also raises general economic productivity. In fact, it is noted that 12% of the increase in productivity recorded in EU economies for the year 2007 is attributed to this sector.⁴

In consideration of all these reasons, the EU places great importance on public policies related to the communications sector. The goal is to ensure that the sector gains dynamism and a more

³ European Commission (2007). "The Lisbon Strategy and the Information Society".

⁴ European Commission (2008). "Preparing Europe's digital future : i2010 mid term review"

Internal taxation in the EU, to a large extent, still lies within the competence of Member States.

competitive structure. Tax policy ranks among the public policies in the EU that have an impact on the performance of the communications sector.

However, Member States shall not act in a manner that may disrupt competition in the EU Single Market in this area.

In reality, tax policies and internal taxation are only partially included in the EU's scope of competence. The competence to devise policies in this area still lies, to a great extent, with national governments. In contrast with common trade or competition policies, Member States have not completely transferred their sovereignty regarding internal taxation to a supra-national institution such as the EU. Consequently, common EU rules on internal taxation are limited. Member states, therefore, have the possibility to implement different policies. In fact, there are still differences in VAT rates among Member States. VAT rates across the EU have converged; however, they have not become uniform. Currently, VAT rates vary between 15% and 25% (see Table 4).

In EU countries, the taxation of the mobile communications sector is limited to VAT

In contrast, even in a policy field where competence in such matters as internal taxation continues to remain, to a large extent, with Member States, there is a body of EU legislation that ties all Member States. The objective of this legislation is to prevent unfair competition in the EU Single Market as a result of divergent internal taxation among Member States. Another objective of EU legislation in this area is to prevent damage to the targets of the Union's Lisbon strategy. Therefore, the EU has the right to object to Member States' implementation of internal taxation that are at odds with these targets.

Except for Greece and Italy, there is no tax specific to the communications sector in the EU

Public policies in the EU related to the taxation of the communications sector have taken into consideration the importance of the sector and the sector has not been subjected to taxation any differently than other economic activities. In EU countries, the mobile communications sector is essentially taxed by way of the Value Added Tax (VAT). With the exception of Greece and Italy, there are no other levies that increase the tax burden of the sector.

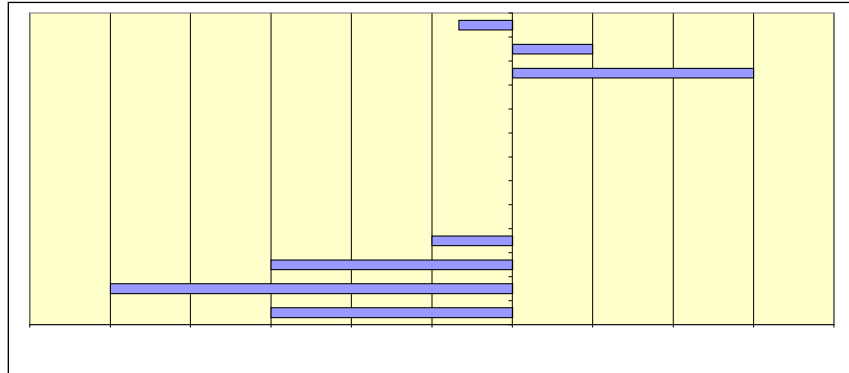
In these two countries, a monthly utilization fee is charged

In Greece, subscribers pay a usage fee ranging between US \$1.92 and US \$5.75 depending on the amount of their monthly bill. In Italy, only postpaid lines are charged a fixed monthly usage fee of US \$6.82. In this country, postpaid line users make up 5% of all users.

There is a tendency in EU nations to stabilize or reduce the tax burden

An examination of developments in EU countries regarding taxes in this sector reveals that in nearly all nations, which have become EU members as a result of the two most recent enlargements in May 2004 and January 2007 and are more akin to Turkey in terms of their level of economic development and national income, there has been a tendency to stabilize or reduce the burden of taxation. In fact, the average tax burden on mobile communications services has decreased in recent years in the EU as well.

Table 2: Changes in the tax rate since 2000

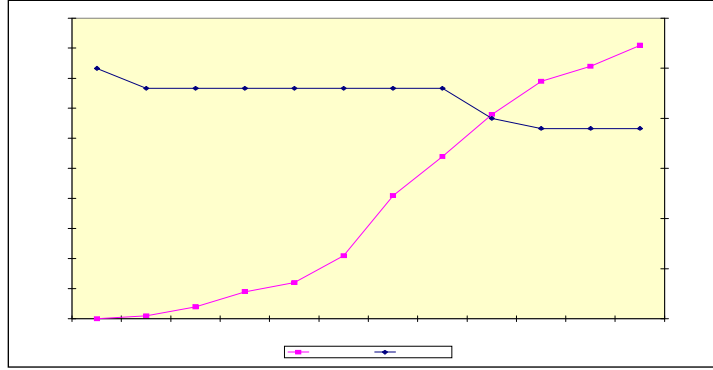


Source : European Commission (2008), “VAT Rates applied in the Member States”.

The following tables indicate the rates of mobile penetration and the changes in tax rates in EU countries that contributed to this tendency.

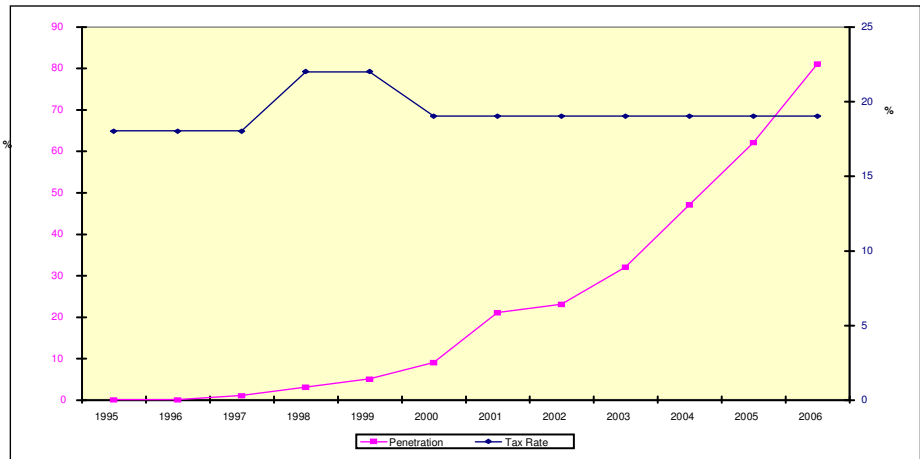
Tax rates and penetration in some EU nations

Table 3 a: Slovakia



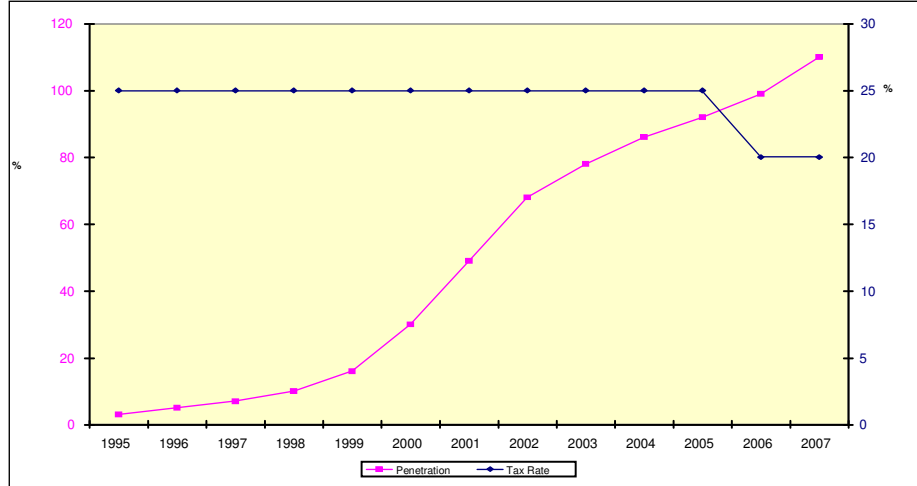
The tendency observed in Slovakia, which began negotiations in March 2000 and became an EU member in May 2004, is a consistent reduction of VAT, also applied to the mobile communications sector. Within the past 10 years, there have been three reductions in the VAT rate in this country. In 1996, the tax rate was reduced from 25% to 23% while, in 2003, it was reduced to 20% and, in 2004, it was reduced to 19%. In the aftermath of the final reduction, the penetration rate in mobile communications has risen from 70% to more than 90%.

Table 3 b: Romania



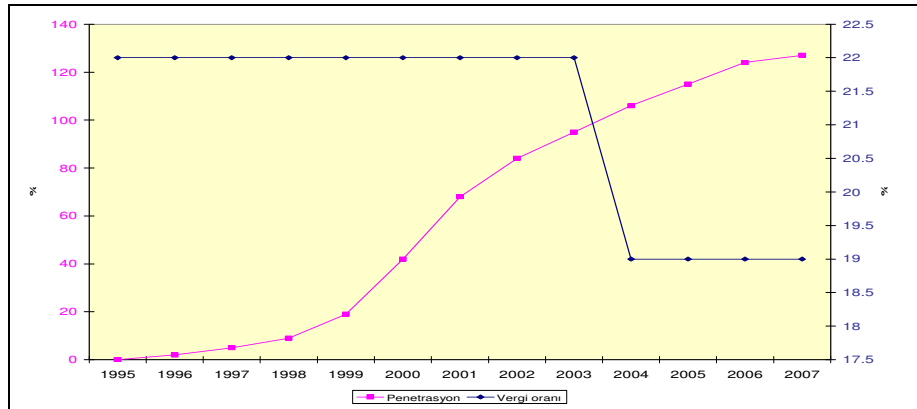
Romania, which became an EU member in January 2007 after having started membership negotiations in March 2000, imposed an increase in the VAT rate in 1998 when the tax rate rose from 18% to 22%. However, in 2000, a decision was made to reduce taxes and the VAT rate decreased to 19%.

Table 3 c: Hungary



Hungary, which became an EU member in May 2004 after having started membership talks in March 1998, implemented a tax reduction in 2006 in the aftermath of EU membership and the VAT rate was decreased from 25% to 20%. Thanks also to the reduction of tax rates; penetration of mobile communications services in Hungary exceeded 100% as of 2006.

Table 3 d: Czech Republic



Source: European Commission (2008), “VAT Rates applied in the Member States”, Eurostat Communications Statistics.

With regard to taxation, the Czech Republic experienced a development similar to Hungary. VAT rates in this country were reduced from 22% to 19% in May 2004 concurrently with its accession to EU membership. Penetration rates in this country have consistently increased as well and are currently at 120%.

The objective of EU's telecommunications acquis, which was most recently amended in 2002, is to create a Single European Market for telecommunication services and networks and to promote competition. Another objective is to ensure universal access by expanding modern communications services. Due to all these factors, the European Commission closely monitors developments in the telecommunications sector both in member as well as candidate countries and regularly publishes reports regarding developments in this sector. As a result, national policies that could disrupt the development of the communications sector can be found to be incompatible with EU rules. EU membership and the target of membership, necessitate on the contrary countries to focus on public policies that will ensure a faster development of this sector.

II. HARMONIZATION WITH THE EU AND TAXATION IN THE COMMUNICATIONS SECTOR

Method of taxation on the mobile communications sector in Turkey and the high tax rates imposed are not aligned with EU rules

High tax rates imposed on mobile communications stand out as an obstacle in front of Turkey's harmonization with the EU. As a matter of fact, this matter is mentioned in the latest annual Progress Report which reviews Turkey's compliance with the acquis communautaire in respect of negotiation chapters. In the evaluation concerning Chapter 10 on information society and the media, it is stated that; "several key outstanding issues remain to be tackled. In particular, adoption of the new electronic communications law (pending since October 2005) would ensure a basis of alignment with the EU regulatory framework. Equally important is the implementation of universal service obligations in compliance with the EU Directive, the licensing regime, including addressing the problem of high communications taxes imposed on operators which are detrimental to market entry, and the effective independence of regulatory body from Government (which remains an important shareholder in several operators)"⁵.

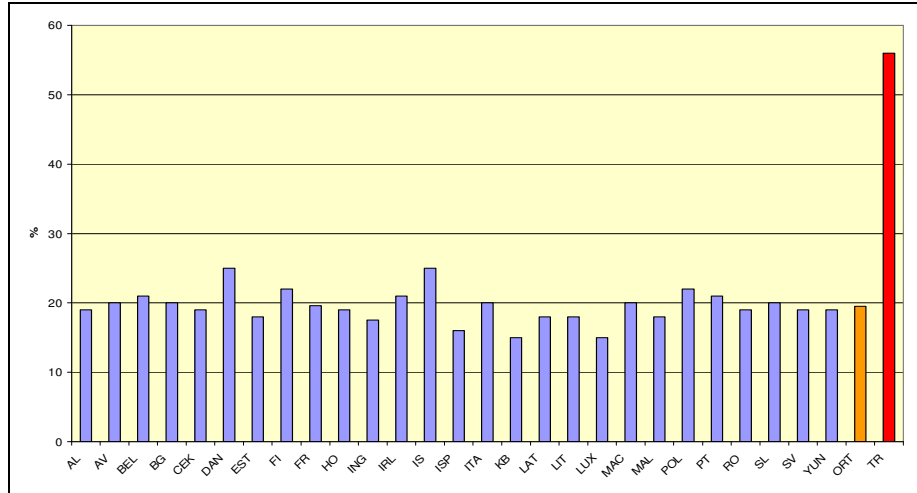
High tax rates imposed on the mobile communications sector in Turkey are incompatible with EU rules due to their negative impact on competition

As reflected in the annual Progress Report, the EU's evaluation concerning high taxes imposed on the mobile communications sector are based on these principles. In principle, EU does not intervene with VAT or Special Communications Tax rates of its member or negotiating states. However, such rates and implemented policies should not undermine the EU's more general objectives such as the protection of competition in the Single Market and the enhancement the Union's competitiveness within the framework of the Lisbon Strategy. Otherwise, such policies of Member States or negotiating countries such as Turkey will be considered to be in violation of EU rules. As a matter of fact, the case in Turkey is a clear example of such a contradiction.

As can be seen in Table 4 comparing the tax burden in Turkey on mobile communications services with that in EU Member States, Turkish mobile communication services users are subject to a greater tax burden compared to the users in EU countries. The tax burden in Turkey is around 3 times the EU average. Taxes in Turkey correspond to a rate which is 2.2 times the highest, and 3.7 times the lowest tax rate in the EU.

⁵ European Commission : Turkey 2007 Progress Report.
http://ec.europa.eu/enlargement/pdf/key_documents/2007/nov/turkey_progress_reports_en.pdf. Page 43.

Table 4: Taxes imposed on mobile communications in EU Member States



Source : European Commission (2008), “VAT Rates applied in the Member States”.

Tax burden in Turkey is almost 3 times the EU average

Taxation system in Turkey violates the EU's principle of tax neutrality

On the other hand, the taxation of mobile operators in Turkey is also incompatible with the EU's principle of taxes not being discriminatory between businesses operating in the same sector. In accordance with this principle -which has been become part of the EU acquis as a result of the ruling⁶ of the European Court of Justice on VAT in 1997, businesses in the same field of activity should be taxed in the same way. However, in Turkey there are certain discrepancies in terms of the tax regulations imposed on mobile telephony operators and fixed-line operators.

⁶ ATAD - Gregg vs. CEC – Decision C-216/97

Table 5: Taxation discrepancies between mobile operators and fixed-line operators

	Mobile Phones	Fixed Lines
Treasury share	15%	
Special Communications Tax	25%	15%
SCT charged on initial subscription	26 YTL.	
Wireless license fee charged on Initial subscription	10 YTL.	
Wireless usage fee (annual)	10 YTL.	
Telecommunications Authority Share	% 0.35	

Taxes imposed on the mobile communications sector and Special Communications Tax imposed on fixed-line operators should be equalized and the Treasury Share should be abolished.

For legislative alignment with the EU in telecommunications taxes imposed on mobile operators and fixed-line operators should be standardized. And for this purpose, Special Communications Tax rates should be equalized and the Treasury share should be abolished. Furthermore, the wireless license fee should no longer be levied from mobile operators but directly levied from the sales of handsets.

III. IMPACT ON SECTORAL GROWTH

High taxes hinder the sector's growth.

The high taxation of mobile communications hinders its growth. Ever since the mobile communications services were launched in Turkey in 1995, the mobile communications sector has grown in relative terms, and its contribution to the Turkish economy has increased. However, currently the heavy tax burden poses a structural obstacle to further growth. So much so that even in countries that were far behind Turkey a couple of years ago, sectoral growth and penetration has surpassed that in Turkey. Yet, Turkey is ahead of these countries in terms of many economic indicators such as income per capita or economic growth rate. The following table shows the penetration rate of mobile communications services in European countries between 2002-2007.

Table 6: Penetration Rate

	Mobile phone users		
	(000s)		Users per 100 persons
	2002	2007	2007
Germany	59'128.0	97'151.0	117.62
Albania	851.0	2'300.0	72.10
Austria	6'736.0	9'768.0	116.83
Belarus	462.6	5'960.0	61.44
Belgium	8'101.8	9'659.8	92.55
Bosnia	748.8	2'450.4	62.28
Bulgaria	2'597.5	9'897.4	129.57
Czech Republic	8'610.2	13'074.7	128.36
Denmark	4'477.8	6'242.6	114.71
Estonia	881.0	1'981.8	148.42
Finland	4'516.8	6'080.0	115.22
France	38'585.3	55'358.1	89.80
S. Cyprus	417.9	962.2	112.59
Croatia	2'340.0	5'034.6	110.52
Netherlands	12'100.0	17'300.0	105.91
UK	49'228.0	71'992.5	118.47
Ireland	3'000.0	4'940.0	114.86
Spain	33'531.0	48'813.0	110.24
Sweden	7'949.0	9'607.0	105.92
Switzerland	5'736.3	8'096.0	108.18
Italy	54'200.0	78'571.0	135.14
Iceland	260.4	347.5	115.44
Montenegro	...	643.7	107.28
Latvia	917.2	2'183.7	95.13
Lithuania	1'645.6	4'912.1	144.90
Luxembourg	473.0	604.2	129.50
Hungary	6'886.1	11'029.9	109.97
Macedonia	365.3	1'517.8	74.46
Malta	276.9	371.5	91.38
Moldova	338.2	1'882.8	49.63
Norway	3'790.0	5'460.0	116.22
Poland	13'898.5	41'388.8	108.68
Portugal	8'670.0	13'413.0	126.26
Romania	5'110.6	22'875.1	106.70
Russia	17'608.8	170'000.0	119.30
Serbia	...	8'452.6	85.74
Slovakia	2'923.4	6'068.1	112.58
Slovenia	1'667.2	1'928.4	96.35
Turkey	23'323.1	61'975.8	82.77
Ukraine	3'692.7	55'240.4	119.55
Greece	9'314.3	11'997.3	107.63
Europe	405'490.7	887'782.7	110.15

In terms of penetration rates, Turkey lags behind other countries in similar income group.

Source : ITU statistics

As seen in the table above, the penetration of mobile communications services in Turkey reached 82% at the end of 2007. However, this rate is higher than only the penetration levels registered in Albania, Byelorussia, Bosnia, Moldova, and Macedonia. Whereas, Turkey is ahead of these countries in terms of income per capita, and furthermore, these services were introduced to the market much earlier in Turkey. The penetration rate is higher even in Bulgaria, Romania, Russia, and Ukraine, who are behind Turkey in terms of income per capita. This outcome is primarily a consequence of the heavy tax burden imposed on the sector.

Penetration rate in many European states are over 100%

This is due to the fact that many people have more than one subscription

82% penetration rate achieved in Turkey does not mean that 82 out of every 100 persons are mobile phone users

Heavy tax burden causes a reduction in minutes of usage and ARPU

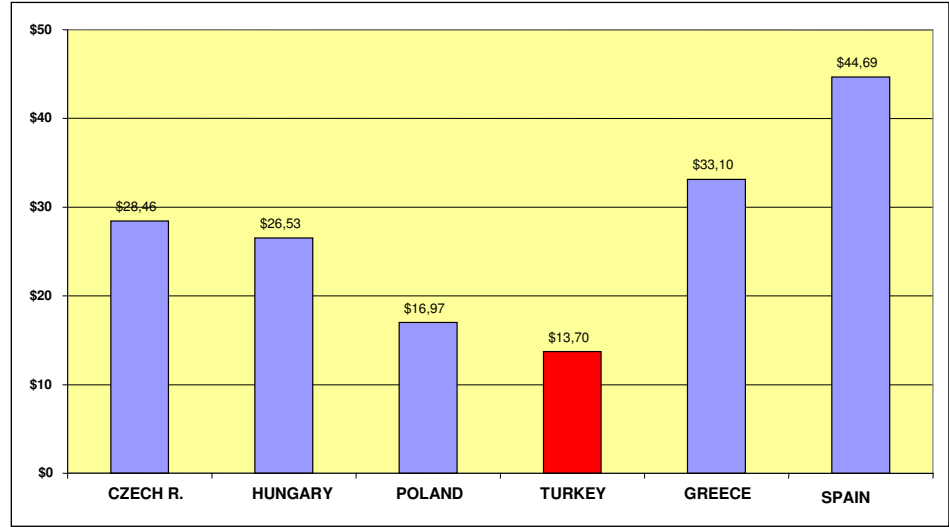
As is seen, the penetration rate in many European countries has already surpassed 100%. Turkey is also getting close to this rate. However, it is crucial to interpret this finding correctly. 100% penetration rate does not mean that everyone is a mobile phone user; as some users have more than one subscription. For example, there are those who want to keep business phones and personal phones apart. These people may use various SIM cards. More than one SIM card being registered on a person theoretically increases the penetration rate, which is defined as the mobile phone service subscription per every 100 people.

There is a similar case in Turkey. The 82% penetration rate registered in Turkey does not mean that 82 out of every 100 people are mobile phone users.

Another indicator showing Turkey's lag in mobile telephony can be observed from usage trends. It can be seen that mobile communications revenues in Turkey are lower compared to countries in the similar income group. For example, ARPU in Hungary, who is 30% richer than Turkey in terms of income per capita, is around two times higher than that in Turkey.

Table 7: Monthly ARPU

In Hungary, which is 30% richer than Turkey in terms of income per capita, ARPU is approximately two times higher than that in Turkey



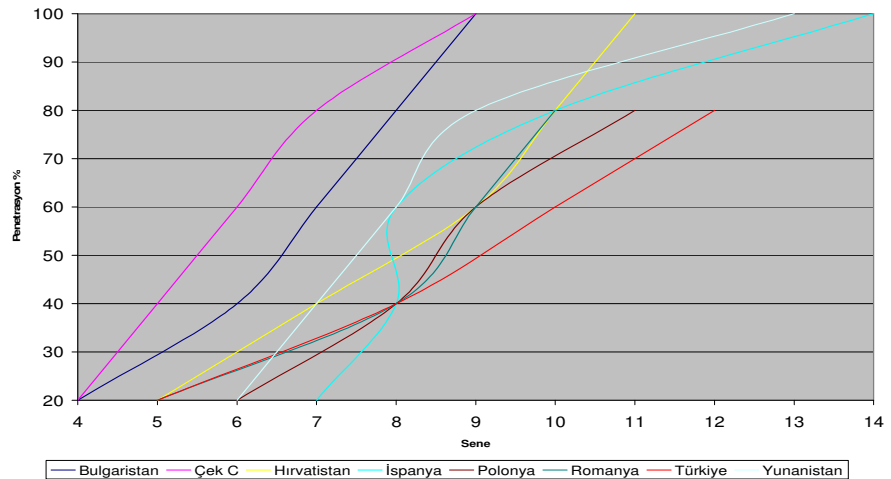
Source : Merrill Lynch Industry Overview, April 2008.

Due to heavy tax burden, development and penetration of mobile communications services have slowed down

The slow down in the penetration of mobile services in Turkey due to the heavy tax burden can also be seen in the table below. The table shows the number of years in which certain threshold penetration figures were reached in various EU countries comparable to Turkey. According to the table, the Czech Republic is the country where penetration increases most rapidly, while Turkey is the country where it increases most slowly. For example, it took 10 years for Turkey to achieve a 60% penetration rate while the Czech Republic reached this rate in 6 years, and Greece surpassed this threshold in 8 years.

Table 8: Evolution of penetration rates

Achieving 60% penetration rate has taken 10 years for Turkey, 8 years for Greece, and 6 years for the Czech Republic



Source : Eurostat 2008

IV. IMPACT ON ECONOMIC GROWTH

There is a proven correlation between penetration of mobile communications services and economic growth

The reason is the positive effect on economic productivity of the penetration of communications services.

Research shows that each 10% increase in mobile communications services in developing countries leads to a 1.2% increase in the GDP.

Mobile communications sector also has other effects on the economy

The importance of the argument that the heavy tax burden on mobile communications services has a negative impact on their penetration rate, highlighted in the previous section, is based on the proven correlation between the penetration of communications services and economic growth. In fact, several economic studies indicate the existence of a correlation between mobile communications services and economic growth. This is due to the positive impact of the penetration of communications services on economic growth. In other words, improved communications pave the way towards a more efficient and prosperous economy. Similarly, the slowdown in the penetration of mobile telecom services means a reduction in the economy’s growth potential.

In order to concretize this correlation, it will be beneficial to summarize current studies. According to the results of a research conducted by Deloitte (Table 9), each 10% growth in mobile penetration in developing countries leads to a 1.2% increase in the GDP. This rate is calculated as 0.6% in the EU and developed countries. On the other hand, the rate of literacy and level of income per capita are noted as factors which have a negative impact on growth.

Table 9: Factors effecting growth

Variables	Coeff.	T-statistics
Mobile phone users per 1000 people	0,0012	2,42
Average investment as a percentage of GDP	0,00208	5,78
Rate of literacy per period	-0,00011	-0,96
Income per capita per period	-0,0036	-2,15

Source : Deloitte (2007), “Global Mobile Tax Review”

Furthermore, the penetration of mobile communications services has another indirect effect on national economic performance. Because this sector is a basic input in economic activities, the increase of productivity in the mobile communications sector has a positive impact on the growth of many different sectors in economy.

The International Commission on Growth and Development underlines the importance of the telecoms industry in its 2008 report

As a matter of fact, the significance of the telecommunications industry is mentioned in this year’s report prepared by the “Commission on Growth and Development”, which was setup in order to prepare a package of basic economic recommendations for the countries to grow in a stable manner in light of globalization, and whose members include Nobel laureate economists Robert Solow and Michael Spence, former Mexican President Ernesto Zedillo, US Secretary of the Treasury Robert Rubin, and UNDP Administrator Kemal Derviş ⁷ . The report states that: *“Telecommunications infrastructure (and the pricing of services) is of particular importance. Telecommunications plays a variety of crucial roles in the public and private sector. It can aid education, transparency initiatives, and the delivery of government services. It can also raise productivity by disseminating price information to farmers, fishermen, and other producers. Telecommunications promotes widespread access to financial services. It also enables trade in services (a rapidly growing area of commerce) and links to global supply chains.”*

Mobile communications sector has a multiplier effect

In various studies aiming to forecast the impact of the added value created by the mobile telecom sector on other sectors of the economy, a multiplier of between 1 and 1.7 was found. Accordingly, each 1 YTL expenditure in the mobile communications sector leads to an increase of between 1 and 1.7 YTL in the business volume in other sectors.

Table 10: Multiplier impact of mobile communications

Title of Study	Multiplier Found
Contribution to the UK economy of mobile phone services, O2	1,13
Study by OVUM Consultancy on measuring the contribution to Bangladesh and US economies of mobile services	1,6
Study by French Mobile Operators' Association	1,7
Study by OVUM consultancy on the economic effects of using radio frequency in the UK	1,1
Analysis on the economic multiplier on investments of telecommunication. Sicrana and Boris.	1,5
Economic effects of using radio. UK Radio Authority 1995	1,4

Source : Deloitte (2007), “Global Mobile Tax Review”

⁷ “Commission on Growth and Development : the growth report”, (2008)

Also, since it provides input to other sectors, mobile communications influences the overall productivity of the economy

Reducing the heavy tax burden on mobile communications shall improve the cost structure of many sectors using these services as input, and shall enable the Turkish economy to be more competitive. According to a calculation made using the Input/Output tables released by the Turkish Statistical Institute TUIK based on the production structure in 1998, major sectors whose cost structures shall be affected in a positive way as a result of a reduction in the tax burden on mobile communications sector are given in the table below.

Table 11: Sectors with large input of communications services

Field of Activity	Share of comm. services in inputs used
Production of medical devices, precision and optical devices	5,20%
Post and telecommunication	1,01%
Land transportation and transportation by pipeline	2,27%
Educational services	2,05%
Renting out mach & eq. Without operators, personal articles and household articles	2,01%
Wholesale commerce and comm. agency (excl. Motor vehicles)	1,29%
Energy generation, transmission, distribution	1,18%
Production of radio, TV, communications equipment and devices	0,88%
Collection, treatment, and distribution of water	0,57%
Printing and services, copying records, cassettes, etc.	0,44%

Source: Our own calculations based on Turkish economy input/output tables (1998).

V. IMPACT ON INCOME DISTRIBUTION

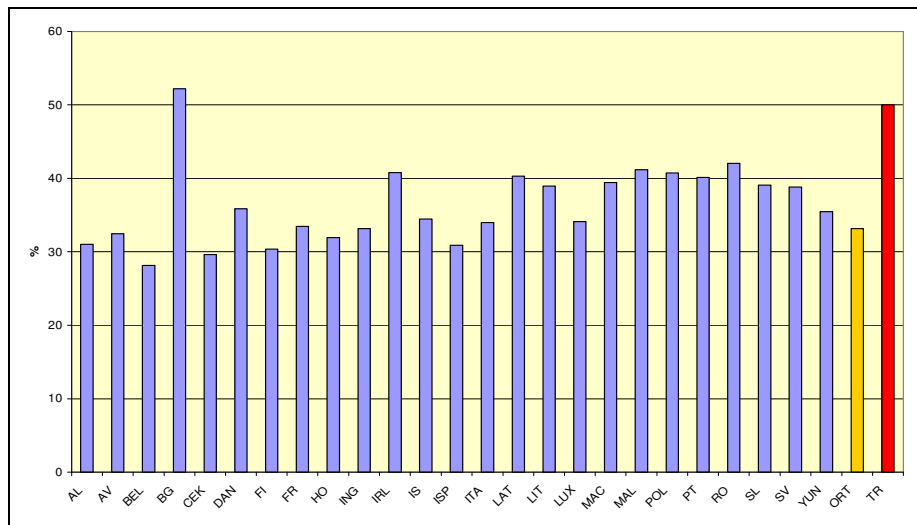
Taxes imposed on mobile communications services have a negative impact on income distribution

Share of indirect taxes increase further in tax revenues

Yet, even now Turkey is significantly above the EU average

The tax burden on mobile communications is also reflected on the balance between direct and indirect taxes in Turkey. Contrary to EU nations, indirect taxes are more prevalent in Turkey. As can be seen in the table below, in Turkey, the share of indirect taxes such as VAT and Special Consumption Tax within overall tax revenue was 50% in 2007; whereas, the EU average is 28%.

Table 12 : Share of indirect taxes within total tax revenues in EU nations and Turkey



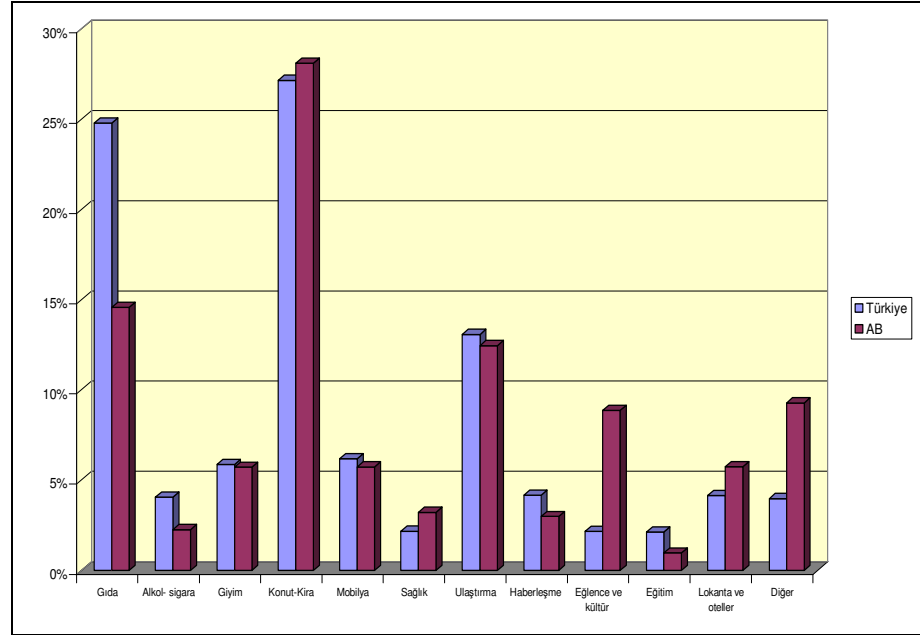
Source. Eurostat and Ministry of Finance.

Share of indirect taxes should be reduced for a more balanced income distribution

Such taxes imposed on the mobile communications sector, further increases this imbalance. Because, in contrast to direct taxes, indirect taxes are collected regardless of the income level of consumers and therefore have a negative impact on income distribution. However, the share of indirect taxes within overall tax revenues should be reduced for improving the income distribution, whereas the share of indirect taxes such as income tax and corporate tax should be increased primarily by widening the tax base and focusing on the fight against the informal economy.

High taxes imposed on mobile communications services in Turkey also affect household expenditures. According to the data from the Turkish Statistical Institute, the share allocated for communications services within total household expenditures in Turkey was 4.18% in 2006.

Table 13: Distribution of household expenditures in EU and Turkey (2006)



Share of communications within household income in Turkey is higher than that in the EU

Source : TUIK and Eurostat

If taxes imposed on this sector are reduced to EU averages, families in Turkey will be able to allocate 25% more for example to healthcare expenditures, without the need for any further savings

Meanwhile, the average in EU nations in the same year was 3%. In other words, as a result of the high communications taxes in Turkey, the share allocated to communications services within household expenditures is 25 % higher compared to EU states.

On the other hand, in case the taxes imposed on mobile communications sector in Turkey are decreased to 20% which is the average rate in Europe, the reduction in cost will be reflected on consumers through lower prices. Consequently, in the light of abovementioned data, such a reduction would enable families in Turkey to increase their budget allocated for family healthcare, for instance, by one fourth without the need to make additional savings⁸.

In contemporary societies, internet access has become important for creating equal opportunities.

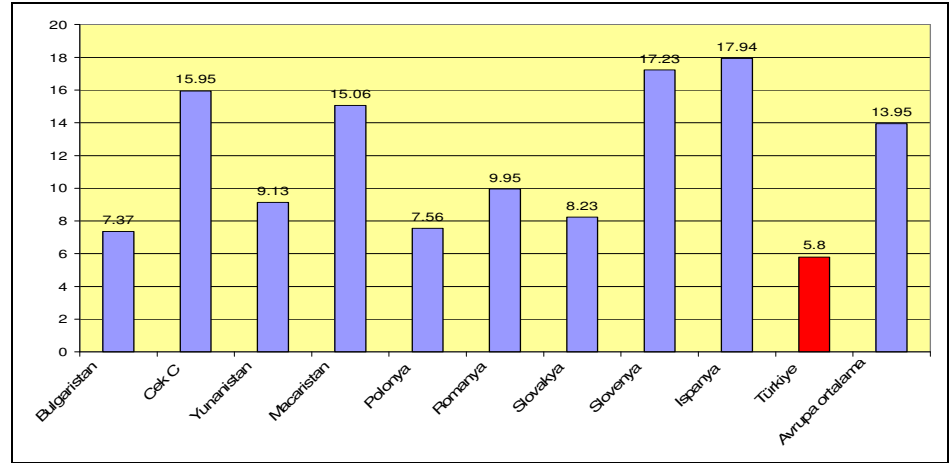
It is also known that one of the fundamental factors that affect income distribution is equal opportunities. Nowadays, internet access has become important for creating equal opportunities. Indeed, through its many different dimensions, the internet contributes to the creation of equal opportunities in many fields from education to culture, consumption to public services. That is

⁸ In order to reach this result, it is assumed that mobile communications and fixed-line expenses within overall household expenditures are equal.

Access to broadband internet in Turkey is far behind the level in European countries

why many countries strive to increase the penetration of broadband internet given that broadband access is indispensable for the effective utilization of the advantages brought by the internet and the applications created. Yet in Turkey as a result of prevailing public policies, broadband internet access remains significantly behind European countries.

Table 14: Broadband Internet access per 100 people (2007)



Source : ITU database

It will be necessary to make use of mobile technologies in order to make broadband internet access more widespread in Turkey

But, mobile data access is subject to heavy taxes just like mobile voice communication

New technologies that will eliminate this gap will be implemented in upcoming years, starting with 3rd generation mobile communications or UMTS technologies. It will be anyhow necessary to make use of mobile technologies in order to make broadband internet access more widespread in Turkey. However, the taxation of mobile communications services stands out as a significant obstacle also in this area. Data communications is taxed in a similar way to voice communications and is subject to a heavy tax burden. Overcoming the lack of progress in the use of broadband internet in Turkey through a more widespread access to broadband can only be possible by reducing the tax burden on the mobile communications sector.

VI. CONCLUSION

Mobile communications services are subject to heavy taxes in Turkey. Turkey, by far, ranks the first in the world in respect of the taxes imposed on such services. In 2007, the contribution of mobile operators to the public budget only through the Special Communications Tax was 4.2 billion YTL. Naturally, this contribution positively impacts Turkey's fiscal balances. However, what is frequently disregarded is that, this tax burden has negative consequences for many other areas of the economy. In this report, the aim was to clarify these negative impacts. Within this framework, it can be seen that the heavy taxation on the mobile communications sector :

- Is incompatible with Turkey's legislative harmonization obligation with the EU,
- Slows down the growth rate of the Turkish economy,
- Reduces direct and indirect contributions of the sector to the Turkish economy,
- Reduces the general productivity of the economy,
- Increases income disparity, and
- Will hinder the penetration of mobile technologies and therefore by undermining the potential to significantly increase broadband internet access will impair the objective to ensure equal opportunities.

Consequently, although the gradual elimination of Special Communications Tax may give rise to the loss of tax revenues in the short term, from the standpoint of general economic balances, it should be considered as a useful measure. Furthermore, the Special Communications Tax was imposed only as a temporary tax following the earthquake in 1999. In order for this tax to be described as "temporary", it should have been abolished by now. Otherwise, the predictability and credibility of Turkey's tax policies, which are extremely significant for investment decisions and the inflow of foreign direct investments, may be undermined.