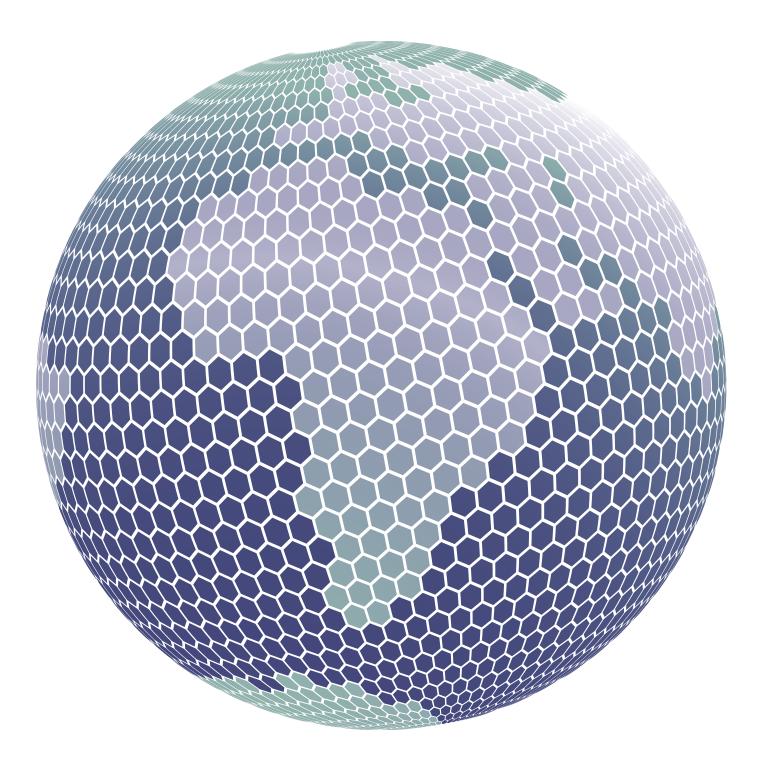


Mobile taxes and fees A toolkit of principles and evidence

Key findings and recommendations



High taxes and fees on mobile sector is a significant policy issue

The mobile sector has a key role to play in economies across the world, and especially in emerging markets, where mobile can support inclusive socio-economic development. Mobile services have wide-ranging direct economic impacts and positive externalities, thus contributing to innovation and enhancing labour productivity.

INCREASED ADOPTION OF MOBILE IS CREATING A NEW GENERATION OF SERVICES AS INTERNET AND 'APP' USAGE GROW. THESE INCLUDE:

- Financial services conducted via mobile networks and devices: Services such as mobile banking, mobile payments and other financial services are recognised as an important component in economic development, particularly for rural communities.
- Health services supported by mobile technologies: It is estimated that developed markets are already saving USD 400 billion in healthcare costs due to mobile use, yet the further potential is hard to overstate. At present, 84 per cent of the global
- population consumes just 11 per cent of the healthcare budget and suffers from nearly 95 per cent of the diseases.1
- Mobile-based learning and education: These include language training, remote education for teachers, classroom support, etc.
- Market information / agricultural and rural development services: A wide range of services including weather forecasts, price information and access to transportation services.

Despite the widespread growth of mobile, the affordability remains a significant barrier to further adoption of the mobile technology required for these services, particularly in developing markets. Taxation of mobile services remains a significant policy issue.

A 2011 benchmarking study by the GSMA and Deloitte showed that mobile taxation has increased in more than half of the 111 countries surveyed.² The GSMA and Deloitte have conducted a further in-depth comparative analysis of mobile taxes and fees across 19 markets.3 Across these 19 markets, over USD 3 in every USD 10 of mobile revenue was transferred to the government in the form of taxes, regulatory fees or other charges. These excessive levels of taxes and fees are not consistent with established taxation principles.

The GSMA and ATKearney (2013), 'The Mobile Economy 2013'.
The GSMA and Deloitte (2011), 'Global mobile tax review 2011'.
The GSMA and Deloitte (2014), 'Mobile taxes and fees: a toolkit of principles and evidence'. Refer to full report for further discussion and notice from Deloitte.

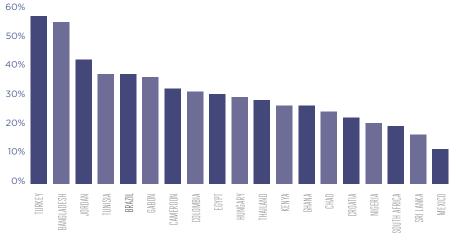
BEST PRACTICE PRINCIPLES OF TAXATION BASED ON PUBLISHED RESEARCH

Taxation is a complex area and, in developing markets the establishment of an effective tax policy has to contend with numerous practical difficulties including widespread informal activity, limited institutional capabilities and political pressure to avoid taxing special interests.4 There are however a number of principles that are generally recognised as contributing to an effective tax system:

- In general, taxation should be broad**based:** Taxation alters incentives for production and consumption, and so economic distortions will generally be minimised where the burden of taxation is spread evenly across the economy. In practice this equates to adopting broadly defined bases for taxation, rate variations that are limited and effective enforcement of tax compliance.
- · Taxes should account for sector and product externalities. The case for

- taxation to address negative externalities such as those arising from tobacco consumption is well recognised. However, the same logic also applies in the case of sectors and products with positive externalities. Taxation policy should encourage sectors, such as mobile, that create positive externalities in the wider economy.
- The tax and regulatory system should be simple, easily understandable and enforced: A lack of transparency over taxation systems and liabilities may deter investors and is also likely to increase enforcement costs for government.
- Different taxes have different economic **properties:** There is a general consensus that, for most products, a broad-based consumption tax will be less distorting than taxation on income or profits.

THE BURDEN ON MOBILE SERVICES AND AVERAGE TAX BURDEN ACROSS MARKETS⁵



(Source: Deloitte analysis)

Figure 1

IMF (2001), 'Tax policy for developing countries'.

Note: There are a wide variety of different studies into the tax burden on the mobile sector using a number of different bottom up and top-down methodologies. For this reason care must be taken in directly comparing burden estimates. In most markets the data relates to 2012 although in a limited number of cases 2011 operator tax data was used where 2012 figures were not available.

Current taxation of mobile is not consistent with recognised best practice

The study identifies four important themes that, taken together, provide clear evidence that current taxation of mobile is not consistent with recognised best practice:

- High burden of taxation on mobile: Taxation on mobile services is more than 30 per cent of mobile sector revenues across the 19 countries studied.
- · Mobile also faces high burden relative to other sectors: Nearly half the burden of taxation on mobile came from taxes and fees levied specifically on the mobile sector. The review identified two additional exacerbating factors arising from this:
 - Much of the mobile specific burden is in the form of regulatory fees which are typically narrowly defined and may disincentivise investment.
 - A high-level review of the technical design of the taxation suggests that many of these mobile specific taxes would not apply to other operators providing competing services such as Voice over Internet Protocol (VoIP). The potential for this to create competitive distortions makes this particularly problematic.
- **Externalities not properly accounted** for in taxation policy: World Bank research suggests that most markets have significant extra capacity to levy additional taxes on economic 'bads'. However, when considering corporation taxes and other broad based levies, there is evidence that mobile is making a disproportionate contribution.

Sector shows an upward trend with a growing proportional burden on mobile:

The majority of markets studied showed an increased mobile tax burden over time. In general this burden of taxation is also increasing faster than the general tax burden. This implies that the gap in the burden between mobile and the rest of the economy is widening.

From a policy perspective, these findings on mobile taxation are concerning. The mobile sector makes a major contribution to economic growth and the affordability of services is a recognised constraint on more widespread usage, particularly in developing markets.

It is estimated that a one percentage point reduction in the tax burden on mobile broadband would result in up to 1.8 percentage point increase in penetration and an up to 0.7 percentage point increase in gross domestic product (GDP) over five years.6 High taxation will also affect the decisions of mobile operators, changing their incentives to invest and altering their ability to raise capital to finance it. A review of over 400 different studies found that, on average, a one per cent increase in the rate of tax on capital led to a four per cent decrease in the level of foreign direct investment (FDI).7

The GSMA (2012), 'The Impact of Taxation on the Development of the Mobile Broadband Sector'.

Mooij and Ederveen (2005), Explaining the Variation in Empirical Estimates of Tax Elasticities of Foreign Direct Investment.

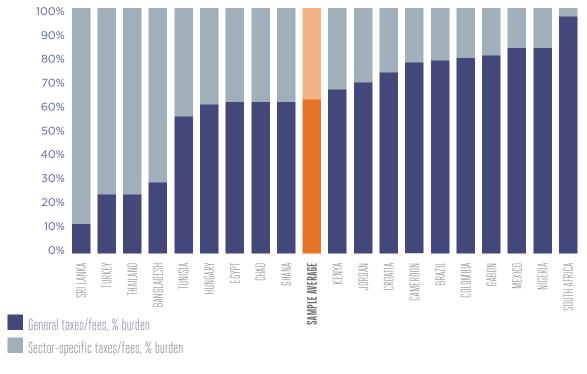
TRENDS IN THE BURDEN ON MOBILE SERVICES AND THE ECONOMY

COUNTRIES	MOBILE BURDEN CAGR® 08-12, %	OVERALL ECONOMY BURDEN CAGR 08-12, %
Jordan	7.7%	-6.6%
Hungary	7.2%	0.5%
Bangladesh	8.0%	3.6%
Croatia	5.9%	-0.7%
Cameroon	2.6%	-2.2%
Brazil	3.8%	0.3%
Sample average	2.1%	-0.2%
Colombia	0.4%	1.8%
Thailand	0.3%	1.2%
Egypt	-1.8%	-5.2%
Turkey	-3.6%	2.3%
Kenya	-7.3%	2.4%

(Source: Deloitte analysis)

Table 1

CONTRIBUTION OF GENERAL AND SECTOR-SPECIFIC TAXES AND FEES TO MOBILE SERVICES BURDEN



(Source: Deloitte analysis)

Figure 2

^{8.} Compounded Annual Growth Rate.

Policy implications and priorities for reform

Taxes and fees levied on mobile services appear to be increasing over time and at a faster rate than other sectors in the economy. High taxes and fees hold back the growth of mobile services and the economic benefits they offer. Previous research has found that as mobile services become more affordable, for example via reductions in the taxes and fees burden, the impact on economic growth is sufficiently high to offset, in the medium term, the direct negative effect on tax revenue.9 The outcome of lowering the burden would therefore be higher economic growth and similar, if not higher, government tax revenue.

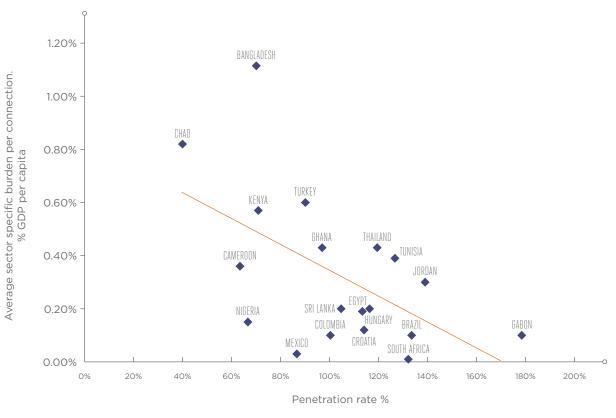
Based on the analysis conducted as part of this study, the following priority areas for reform have been identified:

Reduce specific taxation of the mobile **sector:** Nearly 40 per cent of the tax revenues raised from the mobile sector came in the form of mobile specific taxation. Sector specific charges on this scale are problematic as they distort production and consumption behaviour and reduce the ability of mobile

operators to finance future investment. The issues around mobile specific taxation are particularly acute where the taxes give rise to competitive distortions by applying differently to providers of equivalent services.

- Reduce complexity and uncertainty of mobile taxation: Empirical research has identified a negative relationship between uncertainty over future taxation and investment.¹⁰ The risk of future tax rises is priced into investment decisions and can therefore be expected to reduce investment. This concern was manifest in a number of the markets examined as part of this study.
- Carefully consider taxation of new and emerging services: The growth of mobile data opens up the possibility for the sector to increase its economic value through a whole new generation of products and services ranging from health care services to education and finance. However these services are typically very price sensitive, particularly as they first emerge, meaning that taxation may seriously delay and possibly prevent their benefits being achieved. Within a framework that seeks to rebalance the system towards harmonised and broad-based taxation, it is beneficial to consider transitional arrangements to enable the effective growth of these services, provided that competitive distortions are not created in the process.
- Reduce taxation on access: Taxes and fees levied on consumer access to mobile services are common practice, although vary in level and nature across markets. These include taxes on subscription, activation and/or connection taxes and fees, as well as handset taxes and fees.

SECTOR-SPECIFIC BURDEN AND MOBILE PENETRATION ACROSS COUNTRIES



(Source: Deloitte analysis)

Figure 3

HIGH TAXES CONTRIBUTE TO REDUCTIONS IN THE MOBILE MARKET SIZE IN CROATIA

In 2009, as part of its response to the economic crisis, the Croatian government imposed a six per cent tax on mobile gross revenues related to voice, SMS and MMS. In the year immediately following the introduction of the tax, Croatia suffered the first ever fall in voice and SMS volumes.¹¹

In 2012, the tax was finally abolished as part of an attempt to promote additional infrastructure investment.¹² While it is too early to evaluate the full impact of the policy, there are some indications that this, combined with other structural reforms, may be having a positive impact on FDI and investor confidence.

The GSMA (2012), 'Mobile telephony and taxation in Croatia'.
 Tax News (2012), 'Croatian Lawmakers Abolish Mobile Phone Tax'

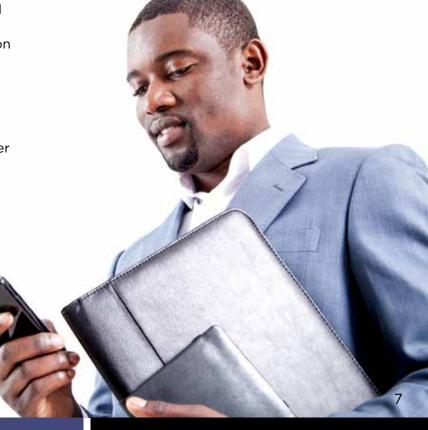
Recommendations for reforming mobile taxation

Addressing these taxation problems will impose a short-term fiscal cost on government. It is difficult to generalise about policy solutions to overcome this, as different countries face different pressures, policy priorities and challenges. However the findings in this report point to three broad options for governments to consider:

- 1. Prioritise harmonisation of taxation with other sectors: High taxation of mobile sector creates long-term fiscal damage and there are significant economic benefits from early reforms. A focus on rapidly addressing the most damaging aspects of taxation will also limit the immediate fiscal cost and maximise the economic opportunity. An equally important reason for early reform is that as the value of the services grows over time, the fiscal cost of reform will be bigger and more difficult to manage.
- 2. Phased reductions of taxes on established services: Phased reductions of taxes and fees offer governments the opportunity to benefit from the economic contribution from mobile whilst limiting short-term fiscal costs. The mobile broadband case study on Brazil shows that simple tax reduction can be revenue generative.
- 3. Consider alternatives: Compared to other industries, the mobile sector pays an above average amount to governments. Early reform and phased reductions of high taxes help governments to manage the fiscal costs while benefiting from the mobile driven growth.

Where compensating tax rises are needed, governments have a range of options available to them. Taxation of economic 'bads' offer governments the opportunity to raise revenue whilst improving economic welfare. Typical examples of economic 'bads' include tobacco, alcohol and environmental pollution.

Greater use of general taxation, particularly on consumption, also offers an opportunity to raise revenue without negatively distorting economic activity. It is often argued that broad-based consumption taxes are preferable to other forms of taxes. The shadow economy is estimated to average 39 per cent of GDP across the 19 markets studied in this report. While addressing this will be challenging, the findings suggest that in the long-run governments have a considerable opportunity to increase tax revenue through expansion of the tax base.



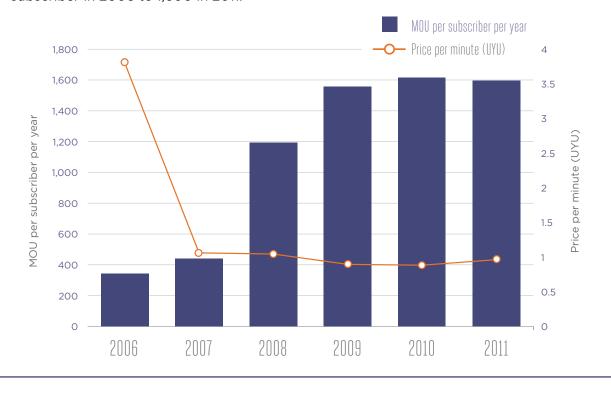
BRAZIL MOBILE BROADBAND CASE STUDY TAX REFORM CAN BE REVENUE GENERATIVE13

Brazil has an extremely complex and high taxation burden. In the case of mobile broadband, it has been estimated that tax increases the cost of use by 40 per cent and the cost of an average handset by 57 per cent. A 2012 study simulated the effect of a one percentage point reduction in the tax burden on mobile broadband by considering the impact on mobile penetration and subsequently on GDP growth.

The study considered two different penetration responses to the tax change as well as three different responses of GDP to the increased penetration. The overall findings were that, over five years, a one percentage point reduction in the tax burden would generate 520,000 - 1,000,000 subscribers, representing an increase in the tax base of two to four per cent. Further, in all the scenarios considered, the tax reduction on mobile broadband would be more than offset by the additional tax generated arising from increased consumption of the service and from wider economic growth.

URUGUAY CASE STUDY LOWERING TAXATION BOOSTS SECTOR GROWTH14

In 2007, the Uruguay government abolished an airtime tax that had accounted for between 30 and 50 per cent of calling costs. In the year immediately following, prices fell by over two thirds from UYU 3.75 per minute to around UYU 1.00 per minute. Penetration has since more than doubled from 65 per cent in 2006 to 141 per cent in 2011. Alongside increased penetration, network use has risen from just under 400 annual minutes per subscriber in 2006 to 1,600 in 2011.



The GSMA (2012), 'The Impact of Taxation on the Development of the Mobile Broadband Sector' The GSMA (2012), 'Mobile telephony and taxation in Latin America'.

The full report and other GSMA research on mobile taxation can be accessed at http://www.gsma.com/publicpolicy/tax

For more information, please contact:

Gabriel Solomon Head of Public Policy gsolomon@gsma.com

Mani Manimohan
Public Policy Director
mmanimohan@gsma.com



GSMA Head Office

Level 7, 5 New Street Square, New Fetter Lane London, EC4A 3BF, United Kingdom Tel: +44 (0)207 356 0600

www.gsma.com