

RESOURCE MOBILISATION AND OLD AGE PENSION ACROSS G20 COUNTRIES: LESSONS FOR CHINA AND INDIA

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ABSTRACT

While most of the literature have focused on the demographic dividend that China and India have vis a vis other developed countries, a little has been said about the state of old age security in these countries. Though China and India have low old age dependency ratio compared to other G20 countries, but the security enjoyed by elderly in these countries in form of old age pension coverage leaves a lot to be desired. Focusing specially on G20 countries for international comparison, this paper tries to argue that contributory schemes for old age pension are insufficient to ensure universal coverage of elderly in India and China and hence there is a need for active state intervention to ensure same. This in turn requires increased expenditure and hence revenue mobilization for which tax policy as a tool needs to be utilized. Making international comparison of tax structure across G20 countries the paper finds that China and India face similar problems in terms of narrow tax base and less progressive tax structure. Low contribution of personal income taxes across both countries is found to be one of the main reasons for this phenomenon. This in turn calls for similar solutions in form of increased revenue mobilization from super rich individuals to ensure tax justice and universal old age pension in these countries.

INTRODUCTION

The World Social Security Report (2010/11) published by International Labour Organisation (ILO) finds China, Indonesia and India to be most vulnerable countries in terms of social security across G20 countries. To understand this phenomenon Section I of this paper try to analyse in detail social security, with special focus on old age pensions, across G20. This section also argues that for improved old age social security increased government expenditure to ensure non-contributory universal old age pension is required, which in turn will require increased revenue mobilization by judicious use of taxation policy. Section II of the paper starts with comparison of social contributions mobilization efforts across G20 countries and later compares tax-GDP ratio across same. Carrying an implicit assumption that direct taxes are more progressive as they are targeted and hence harm poor less as compared to indirect taxes which carries an equal burden for rich and poor, paper later compares tax structure progressivity (in terms of share of direct

taxes in total taxes) across G20 countries. Section III further deepens the analysis by analyzing in detail direct taxes structure across G20 countries. Section IV further builds on analysis carried out in Section III and analyses in detail personal income tax structures across G20 countries. Section V concludes the paper by presenting various similarities or dissimilarities that China and India have with respect to old age security needs and revenue mobilisation strategy required for the same.

SECTION 1

Data compiled by the World Social Security Report (2010/11) from various secondary sources reveals that India and China have considerably low level of old age dependency ratio as compared to other G20 countries. As table 1 below shows in detail, India and China have old age dependency of around 7.7% and 11.4% respectively, compared to G20 average of 17.2%.

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Table 1. Old Age Dependency Ratio¹ across G20 Countries for Year 2010

Country	Percent (%)	Country	Percent (%)
Japan	35.1	Korea, Republic of	15.2
Italy	31.3	China	11.4
Germany	30.9	Brazil	10.2
France	26.2	Mexico	10
United Kingdom	25.1	Indonesia	9
Australia	20.7	Turkey	8.8
Canada	20.3	India	7.7
United States	19.4	South Africa	7.1
Russian Federation	17.9	Saudi Arabia	4.6
Argentina	16.6	G 20 Average	17.2

¹Population aged 65 years or over to the population aged 15-64.

*Source ILO(2010)

However this low old age dependency ratio has in no way resulted in better social security for elderly in these two countries due to the narrowly defined contributory pension schemes. As table 2 below shows, in China only 22.6 % of working age population made contributions to pension schemes, and only 34 % of senior citizens were covered by pension schemes. India performance is even worse with only 6.4 % of working age population making contributions to pension schemes and only 24 % of senior citizens covered by various pension schemes. This performance is in sharp contrast to an average of 63.5 % of elderly receiving old age pensions across G20 countries with figures going as high as 100 % for France and Germany.

Table 2 Effective Extent of Coverage across G20 countries

Country	Share of population above legal retirement age in receipt of a pension (%)	Year	Active contributors to a pension scheme in the working-age population (%)	Year
Saudi Arabia	...	n.a.	20.7	2007
United Kingdom	...	n.a.	71.4	2005
France	100.0	2006	61.4	2005
Germany	100.0	2006	65.5	2005
Canada	90.5	2005	71.4	2006
Turkey	87.1	2006	29.2	2006
Brazil 1	85.9	2005	45.2	2004
South Africa	76.4	2007	...	n.a.
United States	74.0	2006	72.5	2005
Argentina 1, 2	68.3	2005	34.6	2003
Japan	67.9	2005	75.0	2005
Korea, Republic of	33.5	2004	55.0	2005
China	33.4	2007	22.6	2006
India	24.0	2005	6.4	2006
Indonesia	22.9	2003	14.1	2003
Mexico 1, 2	19.2	2005	38.5	2003
G20 Average	63.1		45.6	

Table 2 also reveals that organized sector with proper labour laws and a contributory pension scheme is considerably small in China and India for ensuring universal old age pension coverage. Also the amount of expenditure carried out by China and India on social security and old age pension falls far below G20 average expenditure for same categories. As table 3 below shows while China incurred expenditure of 6 % and 2.4 % of GDP on social security and old age pensions respectively, India incurred expenditure of 4.1 % and 1.9 % of GDP on same. These figures fall

far below G20 average of 15.3 % and 5.2 % of GDP. Hence there is a need for active state intervention in China and India to ensure dignified universal old age pension. This in turn will require the government in these two countries to innovatively use taxation policy for enhanced revenue mobilization to meet the increased expenditure demand. Next section tries to analyse governments efforts regarding resource mobilization across G20 countries and also tries to analyse the tax structure in terms of tax base and tax progressivity across same.

Table 3 Public Social Security Expenditure across G20 countries

Country	Total Public Expenditure (% GDP)	Year	Old Age Expenditure (% GDP)	Year
Italy	25.0	2005	11.6	2006
Germany	26.7	2005	11.2	2006
France	29.2	2005	10.9	2006
Japan	18.6	2005	8.6	2005
Turkey	13.7	2005	6.4	2005
United Kingdom	21.3	2005	6.1	2006
United States	15.9	2005	5.3	2005
Brazil	12.7	2001	4.5	2001
Australia	17.1	2005	4.4	2005
Canada	16.5	2005	3.7	2005
Argentina	12.6	2003	2.9	2003
China	6.0	2006	2.4	2007
India	4.1	2005	1.9	2005
Korea, Republic of	6.9	2005	1.5	2005
South Africa	12.0	2005	1.2	2006
Mexico	7.4	2005	1.0	2005
G20 Avg.	15.35		5.22	

*Source ILO(2010)

SECTION II

Internationally 'Social Contributions' mobilised by government are actual or imputed receipts from either employers on behalf of their employees or from employees, self-employed, or non-employed persons on their own behalf that secure entitlement to social benefits (including old age pension) for the contributors, their dependents, or their survivors (IMF 2001). The contributions may be compulsory or voluntary (ibid.). Here it needs to be mentioned that OECD countries are so strict about social contributions

collections that OECD documents treats 'social security contributions' as tax payments because they are compulsory, unrequited payment to the general government.

Comparison of the social contribution efforts at G20 level, in table.4 below, shows that India performs poorly with regard to same. With only 0.2 % of total revenue realised as social contributions, India ranks last among G20 countries, beating only Indonesia and

Australia. Among developed countries figure is as high as 38.5 % for Germany.

Table 4. Social Contributions Raised across G20 Countries

Country	Year	Social Contribution (% Revenue)
Germany	2009	38.5
France	2009	38.1
Japan	2009	35.7
Italy	2009	30.3
Brazil BCG	2009	26.1
US	2009	22.4
Argentina	2009	21.3
Turkey	2009	21.3
UK	2009	21.2
Mexico	2009	16.7
Korea	2008	13.0
China	2008	12.8
Canada	2009	12.7
Russia	2009	11.6
South Africa	2009	1.8
India CG	2009	0.2
Australia	2009	0.0
Indonesia BCG	2009	0.0

*Source:

1. IMF 2011

2. For Mexico and Argentina, OECD/ECLAC/CIAT 2012

*Note:

1. Unless mentioned otherwise, figures are for GG (General Government)

2. Figure for Mexico and Argentina are for Social Security Contributions

3. BCG (Budget Central Government), CG (Central government)

4. India figure are for CG (Central Government). However, IMF 2011 also reports GG (General Government) value for India for year 2007, which is same as CG value.

In regard to China, though at first sight, it appears to perform better by collecting around 12 % of revenue as social security contributions. However, detailed analysis of tax base later in this paper will show that revenue base is itself narrow in China and hence resulting in low social contribution collection as compared to its population needs.

Revenue base comparison in term of total tax-GDP ratio in table 5 below shows that both India and China have narrow base compared to many developed and developing countries across G20 countries. With a tax-GDP ratio of 15.5 % (as of 2009-10), India has one of the lowest tax bases among G-20 countries (beating only Mexico and Indonesia). China also with a tax GDP ratio of 18.8 % finds BRICS countries like Brazil (25.4 %), Russia (22.9 %) and South Africa (26.5 %) performing better than itself. Other developing countries like Argentina (24.7 %) and Turkey (21.1 %) also perform better than India and China. Needless to add that most of the developed G-20 countries perform much better with tax-GDP ratio figures going as high as 28.7 % for Italy.

Table 5. Tax Base Comparison across G-20 Countries²

Rank	Country	Year	Total Tax Revenue (as % of GDP)
1	Italy	2010	28.7
2	UK	2010	28.5
3	South Africa	2010	26.5
4	Canada	2010	26.4
5	Australia	2010	25.9
6	France	2010	25.6
7	Brazil	2010	25.4
8	Argentina	2009	24.7
9	Russia	2010	22.9
10	Germany	2010	22.4
11	Turkey	2010	21.1
12	Korea	2010	19.4
13	China	2009	18.9
14	US	2010	18.4
15	Japan	2010	16.5
16	India	2009-10	15.5
17	Mexico	2009	14.5
18	Indonesia	2010	10.9
G-20 Avg.		2009/10	21.9

²No data exists for Saudi Arabia

*Source:

Compiled from the data provided in:

Government Finance Statistics 2011, IMF

For Argentina and Brazil, Revenue Statistics in Latin America, 2011 OECD/ECLAC/CIAT

For India: India Public Finance Statistics 2011-12, Ministry of Finance, Government of India.

For Mexico and OECD: Revenue Statistics 2011. OECD

**Note:*

1. For comparability of data between OECD Revenue Statistics, IMF Government Finance Statistics and United Nations System of National Account see Annex A, Revenue Statistics 2011, OECD.

2. Figures are for General Government except for Indonesia; Indonesia figures are for its Central Government's budgetary transactions, as it has a unitary form of polity.

We may also note here that the tax-GDP ratios reported here are those in which the tax revenue figure does not include social security contributions (if any). However, the methodology adopted in some of OECD's publications does make a strong case for including social security contributions (which are compulsory, unrequited and made to the government) in the tax revenue figures for countries. Hence, if we take into account the tax-GDP ratios for all these countries including the social security contributions, the differences between their figures and those of India and China would be even bigger.

Hence China and India need to expand their tax base and this should be done in a progressive manner by increasing share of direct taxes in total taxes revenue. Unlike indirect taxes, direct taxes are linked to the taxpayer's ability to pay and hence are considered to be progressive. Direct taxes comprise taxes on i) Income, profits and capital gains and ii) Property. With direct tax share of 37.7 % in total taxes for India and 33.2 % for China, the tax structure in these two countries is perceived to be less progressive. This is further confirmed by comparing the same with other G-20 countries in table 6 below. Even developing countries like South Africa (57.5 %), Indonesia (55.85 %) and Russia (41.3 %) have a more progressive tax structure than China and India. All developed countries that are part of the G-20 have greater share of direct taxes in their total taxes as compared to China and India, with figures going as high as 75.8 % for USA.

Table 6. Tax Progressivity across G-20 Countries

Rank	Country	Year	Direct Taxes Revenue (as % of Total Tax Revenue)
1	USA	2010	75.8
2	Canada	2010	68.8
3	Australia	2010	65.8
4	Japan	2010	61.2
5	UK	2010	60.9
6	South Africa	2010	57.5
7	Indonesia	2010	55.85
8	France	2010	53.7
9	Italy	2010	52
10	Germany	2010	51.4
11	Korea	2010	50
12	Russia	2010	41.3
13	India	2009-10	37.7
14	Mexico	2009	36.6
15	China	2009	33.2
16	Brazil	2010	32.1
17	Argentina	2009	32
18	Turkey	2010	28.9
G-20 Avg.		2009/10	49.92

**Source:*

Calculated from the data provided in:

Government Finance Statistics 2011, IMF

For Argentina and Brazil- Revenue Statistics in Latin America 2011, OECD/ECLAC/CIAT

For India- India Public Finance Statistics 2011-12, Government of India

For Mexico and OECD- Revenue Statistics 2011, OECD

**Note:*

1. Figures are for General Government except for Indonesia; Indonesia figures are for its Central Government's budgetary transactions.

Searching for possible reasons for narrow tax base and lack of progressivity in Indian and Chinese tax structure, the paper next tries to compare and analyse in detail the relative share of various direct taxes in total tax revenue across G20 countries.

SECTION III

Table 7 below clearly shows that while personal/individual taxes on an average contributed 24 % of total revenue across G20 countries the share was only 6% for China and 10 % for India. In fact China recorded lowest share of personal taxes in total taxes across G20 countries. Here it becomes important to analyze the personal income tax structure across G20 in detail with special focus on China and India, as carried out in next section

Table 7. Share of various Direct taxes in Total Taxes Revenue across G20 Countries

Country	Year	Taxes on Individual income, profits, & capital gains (%)	Taxes on Corporate income, profits, & capital gains (%)	Taxes on Property (%)
United States	2010	44.1	14.52	17.16
Italy	2010	41.05	8.15	2.82
Germany	2010	37.94	9.9	3.59
Australia	2010	37.52	18.23	9.57
United Kingdom	2010	35.28	10.81	14.77
South Africa	2010	31.37	20.87	5.25
France	2010	29.52	7.34	16.78
Japan	2010	29.11	15.63	16.31
Korea, Rep. of	2010	20.16	16.36	13.47
Turkey	2010	17.67	9.9	1.28
Mexico	2009	17.45	11.93	1.7
Russia	2010	17.06	17.49	5.23
Indonesia	2009	11.3	38.26	4.35
India	2008	10.77	21.67	0.42
Brazil	2010	8.51	14.3	4.93
Argentina	2009	6.94	12.09	11.74
China	2009	6.15	17.91	9.15
G20 Avg.		23.64	15.60	8.14

*Source

Calculated from the data provided in:

Government Finance Statistics 2011, IMF

For Argentina and Brazil- Revenue Statistics in Latin America 2011, OECD/ECLAC/CIAT

For India- India Public Finance Statistics 2011-12, Government of India

For Mexico and OECD- Revenue Statistics 2011, OECD

*Note:

1. Figures are for General Government except for Indonesia; Indonesia figures are for its Central Government's budgetary transactions.

SECTION IV

Two important factors that determine the progressivity of personal income taxes is the peak income tax rate that highest income slab attracts and the income level at which peak tax rate kicks in. Personal tax would be more progressive with high peak tax rate kicking in at low income levels. However analysis and calculation below shows that while India suffers from the problem of low peak tax rate, China on other hand suffers from high income level at which peak tax rate kicks in. Also in addition to these structural problems, low compliance level at personal income tax cannot be ruled out. Studies by Comptroller and Auditor General of India (CAG) have repeatedly shown compliance level in India to be way below 50 % for personal taxes.

India has a 'headline' peak tax rate of 30 %. This along with 3 % education cess results in 'effective' peak tax rate of 30.9 %, which kicks in for annual taxable income above Rs 10 lakh³. At 30.9 %, India's peak tax rate falls far below G20 headline peak tax rate average of 37.8 % as shown in table.8 below. Also at 43.8 %, developed countries within G20 have average peak tax rate far above India. Compared to this China performs much better with peak tax rate equal to 45 %.

Table 8. Peak Personal Tax Rates across G20 Countries for Year 2013

Rank	Country	Peak Tax Rate (%)
1	Japan	50
2	United Kingdom	50
3	Australia	45
4	China	45
5	France	45
6	Germany	45
7	Italy	43
8	South Africa	40
9	United States	39.6
10	Canada	39
11	Korea, Republic of	38
12	Argentina	35
13	Turkey	35
14	India	30
15	Indonesia	30
16	Mexico	30
17	Brazil	27.5
18	Russia	13
19	Saudi Arabia	-
G-20 Avg.		37.8

*Source: KPMG Online Database ⁴

*Note: 1. For Canada figure are for federal and provincial combined.

As regards annual income level at which peak tax rate kicks in, on an average peak tax rate kicks in at Rs \$0.146 million per annum for G20 countries and \$ 0.097 million per annum for BRICS countries.

³ Union Budget 2013-14 proposal (just for one year) of 10 % surcharge on people with taxable income above Rs 1 crore per annum will increase effective peak tax rate on super rich to 33.99 % as compared to present 30.9 %.

⁴ & ⁵ As viewed on 15 April 2013 (<http://www.kpmg.com/Global/en/services/Tax/tax-tools-and-resources/Pages/individual-income-tax-rates-table.aspx>)

However, compared to these, China's peak tax rate of 45 % kicks in at \$ 0.227 million, which is considerably higher than G20 and BRICS average. Also only few countries like Germany, Korea and USA have peak tax rate kicking in at higher income level than China.

Table 9. Annual Income Level at which Peak Tax Rate kick in across G20 Countries

Country	National Currency Units*	Purchasing Power Parity (PPP) Rate**	Int. US \$ *** (Million)
Brazil	51,259.08	1.88	0.027
Argentina	1,20,000	2.922	0.041
Mexico	3,92,842	8.958	0.044
India	10,00,000	20.082	0.049
Turkey	80,000	1.33	0.06
Indonesia	50,00,00,000	7173.22	0.07
France	70,830	0.914	0.077
Italy	75,000	0.856	0.088
Canada	1,35,055	1.249	0.108
South Africa	6,38,600	5.672	0.113
Australia	1,80,001	1.572	0.115
Japan	1,80,00,000	103.9	0.173
United Kingdom	1,50,000	0.674	0.223
China	9,60,000	4.238	0.227
Germany	2,50,731	0.837	0.3
Korea, Republic of	30,00,00,000	806.385	0.372
USA	4,00,000	1	0.4
G20 Avg:			0.146
BRICS Avg.			0.097

*Source: KPMG Online Database ⁵

**Source: PPP rate for year 2012 taken from World Economic Outlook (IMF) online database.

*** Source: Calculated by author using PPP conversion rate

****Source ILO 2010

Therefore it is seen that while India and China both have low level of personal taxes share in total taxes, policy reasons for them are quite different. While India should learn from China and increase its peak tax rate considerably from present 30 % to G20 average of around 38 %, China on other hand should learn from India and reduce its peak tax rate kick in income level from present \$ 0.227 million to BRICS average of around \$ 0.097 million per annum.

CONCLUSION

Among the G20 countries India and China's resemblance goes beyond high growth rates witnessed over past couple of years. Analysis of social security especially in terms of old age pension coverage reveals that both India and China are in a vulnerable state regarding same. However increased old age provisions calls for increased expenditure, which in turn requires increased revenue mobilisation. The paper finds that tax potential is not properly utilized by China and India as shown by their low tax-GDP ratios. In addition the tax system is harder on poor section of the society with share of indirect taxes being around two times of direct taxes share in total taxes revenue. Further analysis of direct taxes reveals a dismissal performance across personal taxes for both India and China. While India's personal income tax suffers from low peak tax rates China's personal income tax structure suffer from high peak tax rate kick in income level. Therefore to ensure a universal old age pension China and India need to use their taxation policy more judicially with special focus on personal tax policy to tax super rich in their respective countries.

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