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Requirements for a Modern Tax System in Global Comparison

Presentation for „The Chinese Tax System Reform“

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Preface

- International organizations like the International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD) classify China as an emerging economy. This classification is the background of all the analysis carried out or referred to and all statements made.
- Another underlying assumption is that the Chinese government and the Chinese economy want to realize similar objectives as western countries do.

Thank you very much.

A modern tax system – the main objectives

- Primary Objective: Generate revenues to finance the public sector.
- Possible secondary objectives are:
  - Avoid obstacles for economic growth
  - Smooth the cyclical volatility of economic growth
  - (Re-)distributional aspects / improvement of equality
- The above mentioned objectives apply worldwide more or less the same way. Depending on the situation of a specific country different aspects can / should be emphazised.
  - An exhaustive elaboration of the criteria for a good tax system in given by Meade, James E. (Chairman), 1978, The Structure and Reform of Direct Taxation, Report of a Committee Chaired by J.E. Meade, Institute for Fiscal Studies, London.

Characteristics of the Chinese economy

- China has a low income level (GDP per capita) but high growth rates.
- China was hit very fast by the recent economic crisis 2008/2009.
  - But the decline of the growth rates was overall a bit less than the international average.
  - The Chinese Economy recovered and is presumed to have growth rates at or even above the pre crisis average.
- China attracts large amounts of inward foreign direct investment (FDI).
- China achieved a large reduction of poverty during the last decade.
- But the inequality of income remained high.

  - For background and further information see Appendix I

Tax revenues – an international comparison

	Total tax revenue (in-cluding social secu-rity contributions)	Total tax revenue (ex-cluding social secu-rity contributions)	Taxes on income & profits	Taxes on goods & services	Other (including social security contributions)
Canada	31,0	26,2	14,5	7,5	9,0
France	42,9	26,3	9,4	10,7	22,8
Germany	36,3	22,1	10,4	10,7	15,2
Italy	43,0	29,4	14,1	11,1	17,8
Japan	26,9	15,9	8,0	5,1	13,8
United Kingdom	35,0	28,3	13,1	10,8	11,1
United States	24,8	18,3	10,7	4,5	9,6
Korea	25,1	19,4	7,1	8,5	9,5
China	18,4	17,0	4,4	9,6	4,4

- Tax revenues in percent of GDP 2010, Japan Social security contributions = 2009
- Source: OECD Revenue Statistics 1965-2010, IMF Staff Report for the Article IV Consultations, People's Republic Of China, 2011

Interim conclusion:

- The level of tax revenues is comparatively low in China.
  - It is below 20 percent of GDP, but steadily increasing since the 1994 tax reform.
- However, the chinese tax system genreates a sufficient amount of revenues to finance the public sector.
  - 2011 general government gross debt accounted for 25.8 percent of GDP which is predicted to decline to 10 percent of GDP until 2017 (source: Fiscal Monitor, IMF, April 2012).
- The Chinese Tax system relies heavily on taxes on goods & services.
  - This category comprises general consumption taxes (in most countries a value added tax (VAT)) and taxes on specific goods and services.
  - Chinese Level of revenues from taxes on goods and services in percent of GDP (9.6) is almost on a par with OECD average (10.1). Both numbers represent the 2009 level.

Possible reasons for tax reform

- There is no obvious need for higher tax revenues (primary objective). But the economic situation of China gives room to promote several secondary objectives that could be improved by tax reforms:
- A higher GDP per capita / further reduction of poverty could be desirable though GDP growth rates are already high.
- A smaller volatility of GDP growth rates and a lower vulnerability to international crises would be helpful.
  - But China has no chance to achieve this by a tax reform (see Appendix II).
- A more equal distribution of income might be wanted.
  - It is in most advanced economies highly appreciated (to fight dissatisfaction).
  - It can be an approach to fight poverty (together with higher transfers).
  - It can lead to a more sustained growth in the long run.

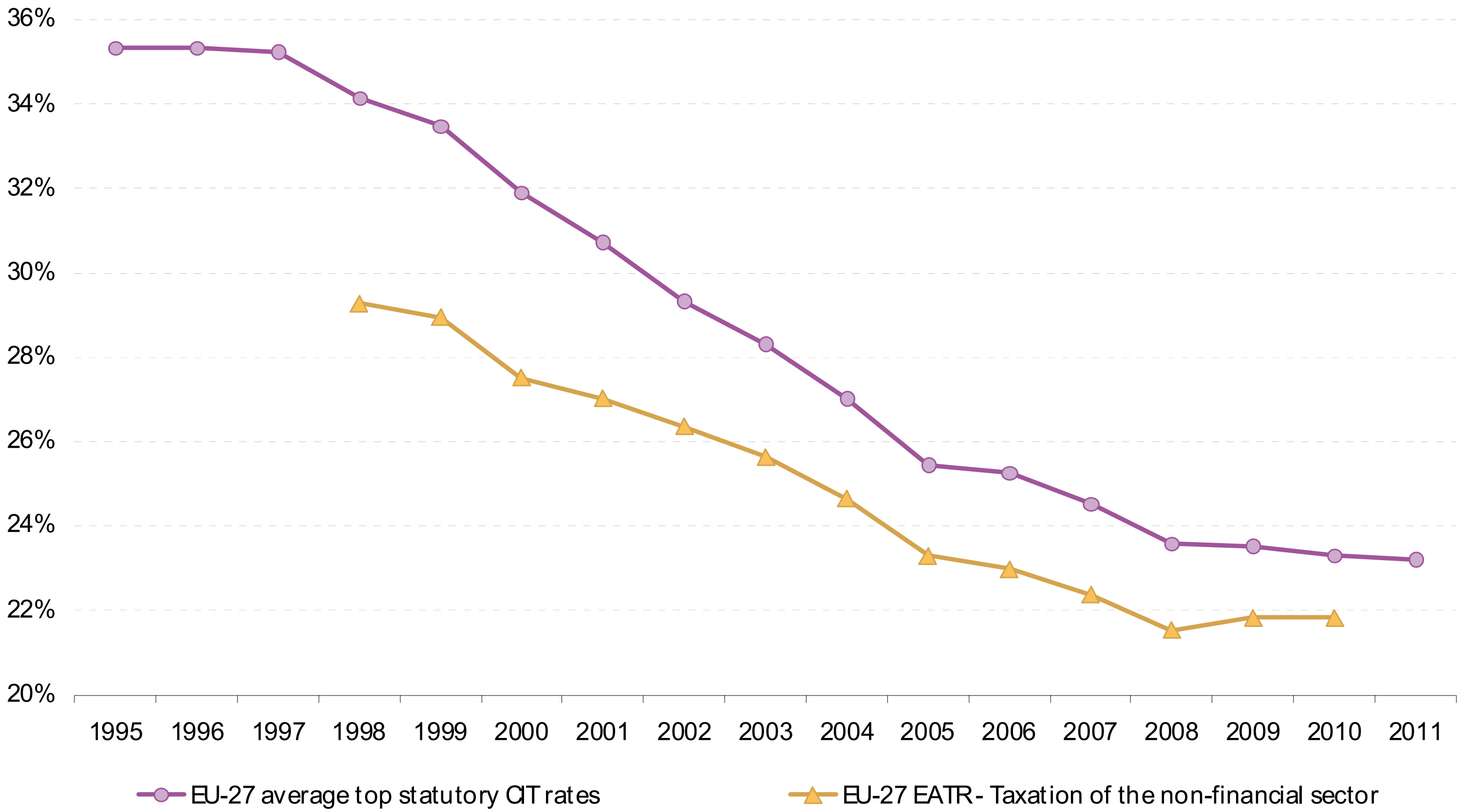
Tax reform for growth I

- China attracts a large amount of inward FDI. That means there is a large inflow of capital and a high level of physical investment.
- Decisions about FDI follow the OLI paradigm:
  - O = ownership advantage (an internal solution is superior to a market solution e.g. due to economics of scale, proprietory technologies, brand names etc.)
  - L = location advantage (country specific advantages e.g. labour market situation, government policies)
  - I = internalisation advantage (foreign market entry mode: joint ventures, takeovers etc. are superior to licensing etc.)
- The location advantage of a country comprises the tax system.
  - Capital income taxation in particular the corporate income tax (CIT) should influence FDI decisions because they are part of the location advantage.

International tax competiton

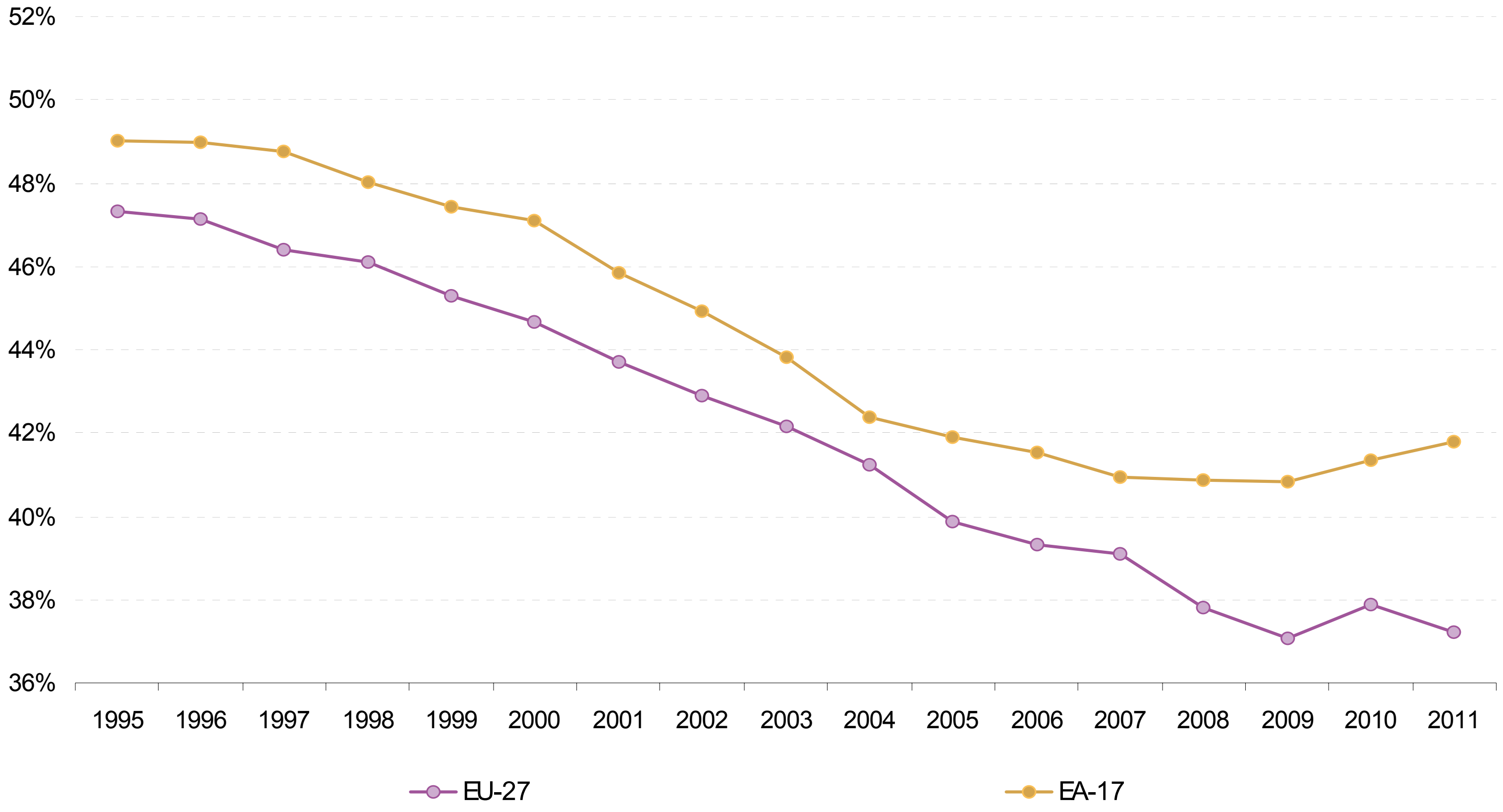
- Sources of long term growth:
  - Quantitatively or qualitativley higher input of labour
  - Higher input of physical capital = more (foreign direct) investment
  - Higher total factor productivity
- Mobility of prodcution factors is different:
  - Financial capital has the highest degree of mobility followed by labour followed by physical capital.
- Countries rival for mobile production factors to allocate them within their jurisdiction. That is mainly capital. By this way they can increase the income level of the (relatively) immobile factors.
- Empirical evidence is far from being conclusive but the majority of the studies indicates that taxes do matter for the decision about FDI!
    - See e.g. Feld / Heckmeyer, 2009, FDI and Taxation: A Meta Study, CESifo WP No. 2540

European reaction on international tax competition – a decline of the CIT



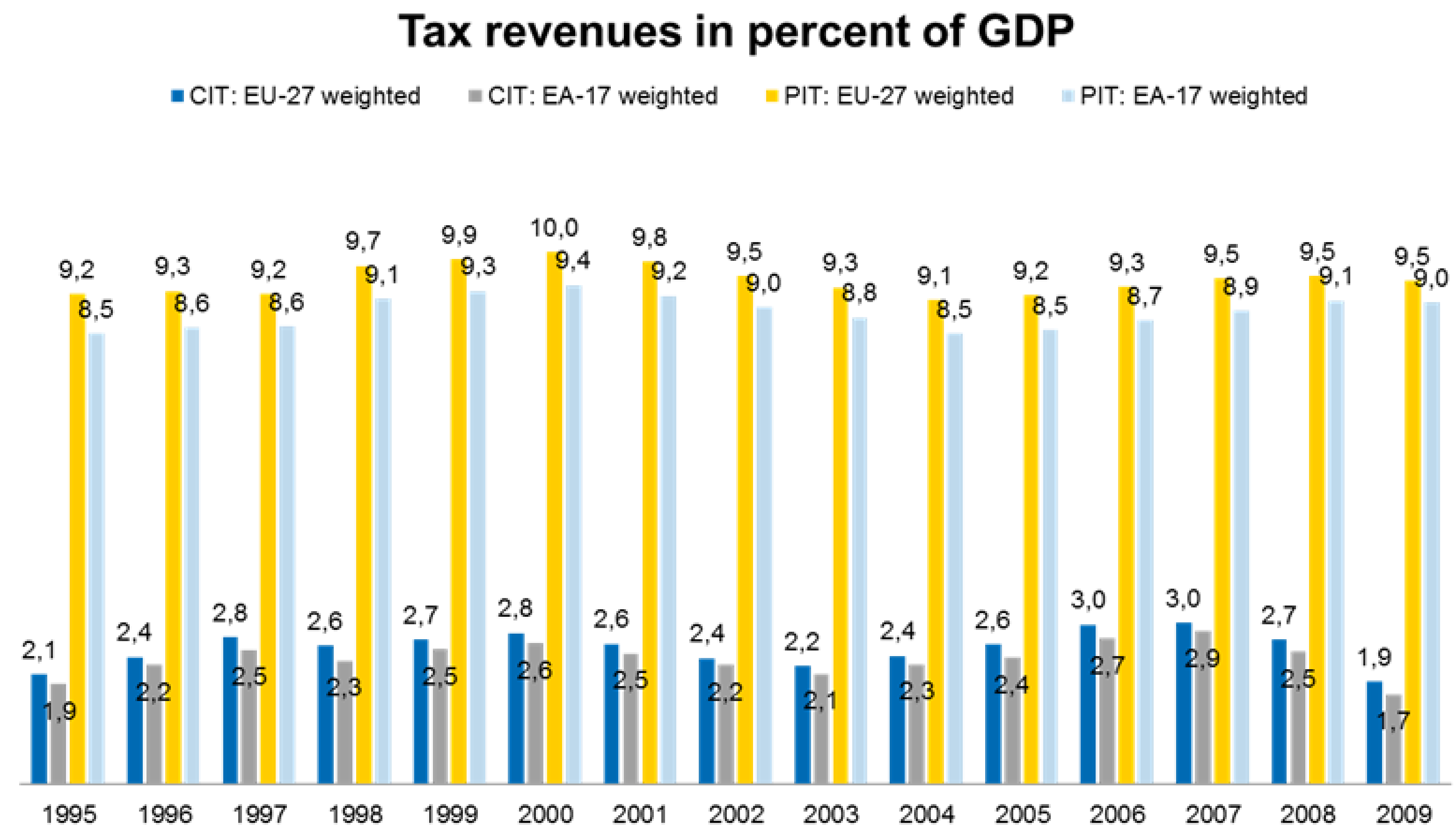
Source: European Commission, 2011, Taxation Trends in the European Union

European reaction on international tax competition – a decline of the PIT top rates



Source: European Commission, 2011, Taxation Trends in the European Union

Tax rates declined but tax revenues did not



Source: European Commission, 2011, Taxation Trends in the European Union

The Chinese corporate income tax (CIT)

- In an international comparison statutory tax rates are between medium and low.
  - Standard rate of 25 percent, reduced rate of 15 percent for qualified enterprises
- Temporary tax exemptions for foreign investment enterprises (FIE) up to 50 percent are granted.
- Unfortunately there is no effective tax rate that reflects the combination of statuatory rate and tax base computed up to now.
- There seems no urgent need to lower the tax burden of enterprises to boost inward FDI. However, this is no final judgement.
  - 2003- 2008: Physical capital investment ~ 45 percent of GDP; FDI > 7 percent of GDP.
    - Source: Conway et al., 2010, Long Term Growth and Policy Challenges in the Large Emerging Economies, OECD Working Paper No. 755

Basic outline for a growth related tax reform

- A tax system should be neutral. That means it should leave economic decisions as unaffected as possible.
  - In a capitalistic economy the market reactions indicate which decison is good or bad, e.g. which investment is profitable and which is not.
  - Any subsidy in favour of a specific sector has to be payed by other sectors. That causes a higher tax rate / burden for those sectors provided government revenue needs are constant. This creates disincentives to invest or to work in these sectors.
- For a successful management of a distortive tax system the govern-ment needs extensive knowledge of market developments and how the private sector will adopt to their policies → possible?
- In theory all tax exemptions should be abolished! Reality → illusion!
- However, positive external effects can justify special tax treatments.
  - Transfer of knowledge related to FDI and FIE is such a positive external effect.

Tax reform for growth II

- Almost every taxation, particulary income taxation causes distortions:
  - Capital income taxation: Decision between saving / investment and consumption
  - Labour income taxation: Affects marginal and inframagional labour supply (provided income level is sufficiently high)
- A shift towards less distortive taxes can increase growth:
  - Consumption taxes are less distortive. They can provide an equally large amout of tax revenues as income taxes do but leave decisions to save, invest and work unaffected.
  - Taxes on immobile property (land) or an inheritance tax also cause only little distortions because decisions are left unaffected (land = immobile; inheritace = bequather is dead).
- But the Chinese revenues from taxes on income and profits are already low. A further reduction seems not to be appropriate.
- China already relies mostly on taxes on goods and services. A further strenghtening of these revenue sources would be questionable.

Tax reform for equality

- A progressive taxation can reduce differences in pre-tax income.
  - Progressivity: The average tax rate increases with an increase of the tax base → the larger the (individual) tax base the larger the share of it payed as tax.
- But not every tax can be progressively designed.
  - Only direct taxes can have progressive tax rates; direct tax: Those who effectively pay the tax to the government are identical to those who bear the tax burden.
  - Typical (direct) progressive tax : Personal income tax (PIT)
- Indirect taxes can only have a proportional tax schedule.
  - Indirect tax: Those who pay the tax to the government are not identical to those who bear the tax burden.
  - Typical indirect tax: (Consumption type) Value added tax (VAT); the vendor pays the tax but the tax burden is born by the consumer because it is included in the price.

The personal income tax (PIT)

- In OECD countries the PIT is a major source of tax revenues accountig for roughly 35 percent of all tax revenues (including social security contributions). That equals about 9 percent of GDP.
  - In China all taxes on income and profits account for 4.4 percent of GDP. Here PIT is included. Thus PIT revenues must be less than half of the OECD average.
- Empirical results indicate almost any redistributive impact of the Chinese PIT (see e.g. Xu / Yue, 2011, Redistributive Impact of Personal Income Tax in Urban China, CIBC Working Paper).
  - Redistributive impact of the PIT is captured by the Musgrave-Thin index (MT-index). This is the difference between the pre-tax and post tax Gini-coefficient. That is the difference between pre-tax and post tax distribution of income.
  - MT-index 2002 = 0,0064; 2007 = 0,0132 → close to zero; MT-index = 0 → pre tax and post tax distribution of income are identical

An equality enhancing PIT reform

- The Chinese PIT seems to be the best subject for a tax reform in particular with respect to equality.
- To enhance equality by a PIT reform progressivity needs to be increased. This can be achieved by various measures:
  - More progressive statutory tax rates / tax scale (higher tax rates for high income earners or lower income limits from which the tax rates apply)
  - Moving from a tax schedule that comprises lower or proportional tax rates for specific kinds of income towards a comprehensive income tax
  - Abolishment of tax exemptions that mostly benefit the wealthy / high income earners because low income earners are usually limited to labour income

A higher progressivity – the pros and cons

- An effectively more progressive tax structure does increase equality.
- At the same time it creates distortions that cause disincentives to invest and / or to work.
- **There does exist a tradeoff between efficiency (economic growth) and equality - at least in the short run.**
- Chinese statuatory tax rate of the PIT goes up to 45 percent. That‘s on a par with most OECD countries and should not be increased any further.
- Less distortive measures to increase progressivity:
  - Establish a comprehensive income tax / abolish all tax exemptions.
  - There is no need to introduce a progressive tax schedule when it is effectively not applied.

Comprehensive income tax – is it desireable?

- A comprehensive income tax was the long time standard in most OECD countries.
- With the upcoming globalization a lot of countries introduced a special tax treatment of capital income e.g. the dual income tax in scandinavian countries with a low, proportional tax rate.
  - Background: Reduce disincentives to save and invest to avoid obstacles for growth
- But China and OECD countries have entirely different starting points:
  - The current Chinese tax system is designed to promote growth.
  - The tax systems of advanced economies, particulary in Europe were and still are focussed on the creation of a high degree of equality.
- China could move twoards an equality enhancig PIT without damaging growth too heavily in the long run.

Can higher equality benefit growth?

- Emerging economies typically show high but unsteady growth rates.
- Any income level achieved in the past needs to be sustained and growth rates need to be stabilized.
- Empirical evidence suggests that a more equal distribution of income leads to longer lasting periods of growth in emerging economies.
  - See e.g. Berg / Ostry, 2011 Inequality and Unsustainable growth: Two Sides of the Same Coin? IMF Staff Discusson Note SDN/11/08
- But in the short run the negative impact created by disincentives to invest / work remains. Thus empirical evidence is not decisive.
- However, equality of income should not be neglected:
  - A higher degree of equality can increase growth rates in the long run.
  - It can improve the satisfaction of large fractions of the population.

Thank you very much for your attention.

Appendix I
Economic Indicators

The Chinese economy – some indicators I

- Income (GDP) per capita (2008): 3.259 USD
  - OECD average: 40.909 USD
  - Asia/Pacific average: 8.537 USD
- Average growth rate (1995-2008): 8.8%
  - OECD average (1995-2008): 3.1%
  - Asia/Pacific average: 4.0 %
    - Source: Society At A Glance, Asia/Pacific, OECD, 2011
- Both, the low income level and the high economic growth rate are typical characteristics of an emerging economy.

The Chinese economy – some indicators II

- The economic dowturn affected China overall a little less than other countries. Worldwide the recession caused from 2007 to 2009 a drop of the growth rate of 6 percentage points. Real GDP growth rates:

	2006	2007	2008	2009	2010	2011	2012
World	5.2	5.4	2.8	-0.6	5.3	3.9	3.5
Advanced Economies	3.0	2.8	0.0	-3.6	3.2	1.6	1.4
Emerging Economies	8.2	8.7	6.0	2.8	7.5	6.2	5.7
China	12.7	14.2	9.6	9.2	10.4	9.2	8.2

  - Source: IMF World Economic Outlook 2012, 2012 Projection

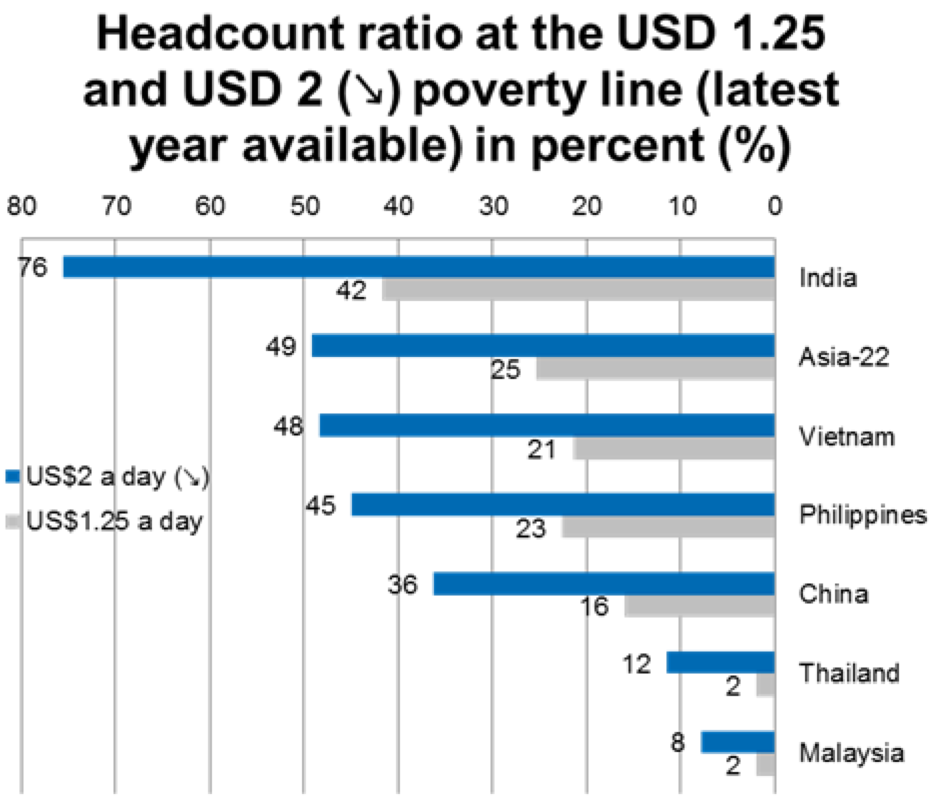
- China was hit faster than the rest of the world. While in most countries growth rates fell roughly by the same amount in 2008 and 2009 (about 3 percentage points) China performed a loss of growth of 4,6 percentage points in 2008. Overall the growth rate declined for 5 percentage points.

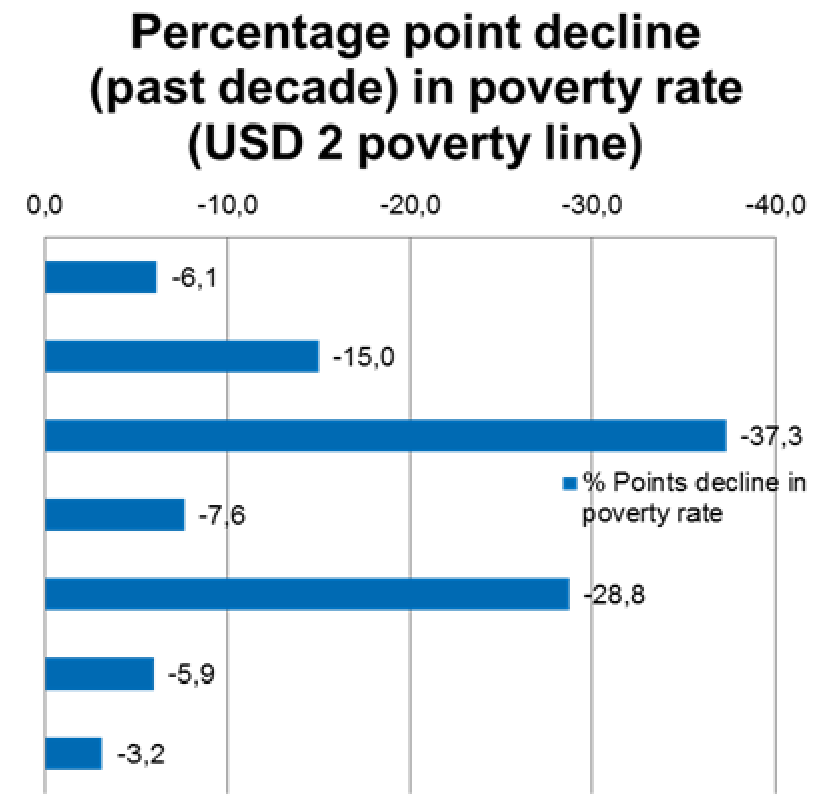
The Chinese economy – some indicators III

- China attracted a large amount of inward FDI. This investment provided a large contribution to the high growth rates.
- Inward FDI stocks 2010:
  - USA: 2.659 Bio. USD
  - China: 1.476 Bio. USD
  - UK: 1.086 Bio. USD
  - Germany: 965 Bio. USD
  - France: 957 Bio. USD
  - India: 198 Bio. USD
- Chinese inward FDI stocks doubled between 2007 and 2010.
    - Source: OECD Factbook 2011

The Chinese economy – some indicators IV

- China recently achieved a large reduction in poverty.

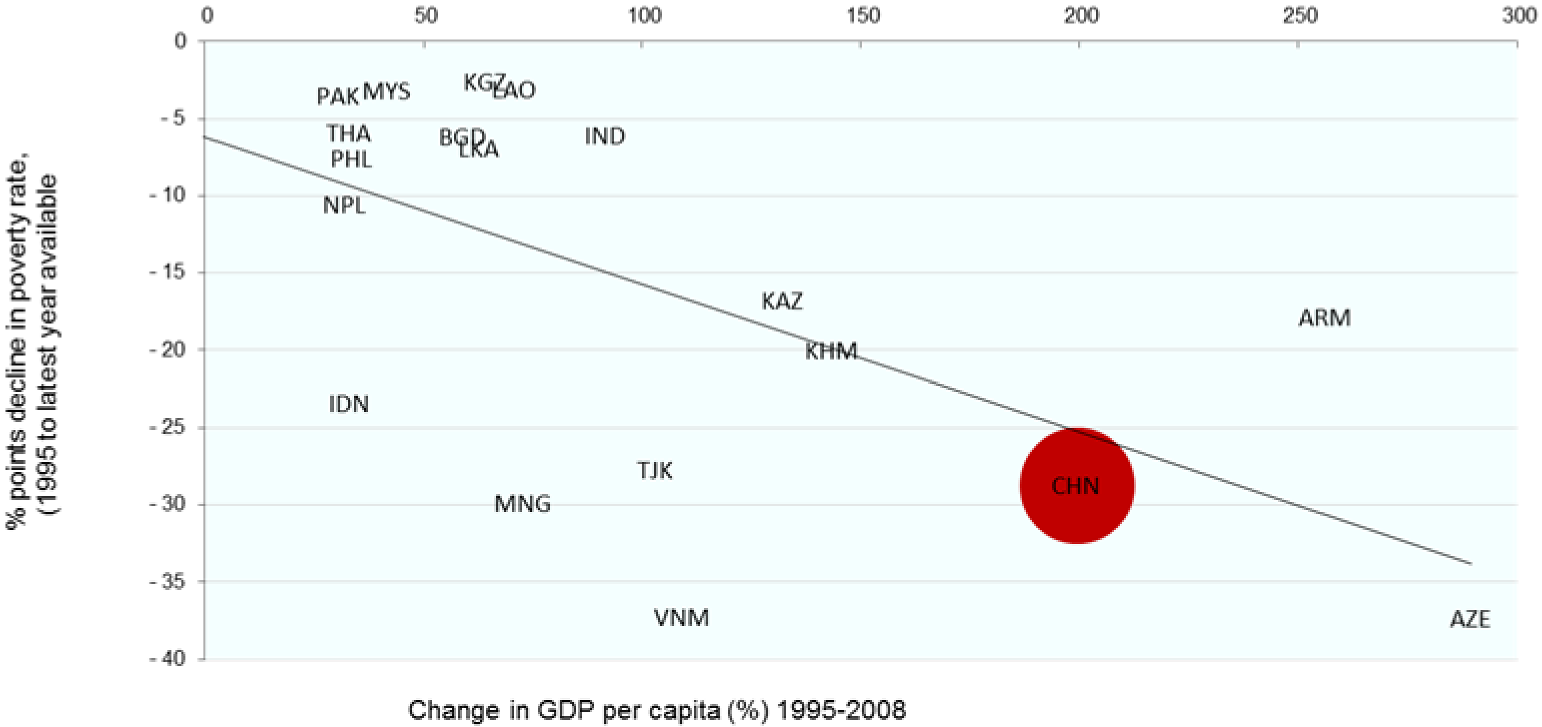




- Source: Society At A Glance, Asia/Pacific, OECD, 2011

The Chinese economy – some indicators V

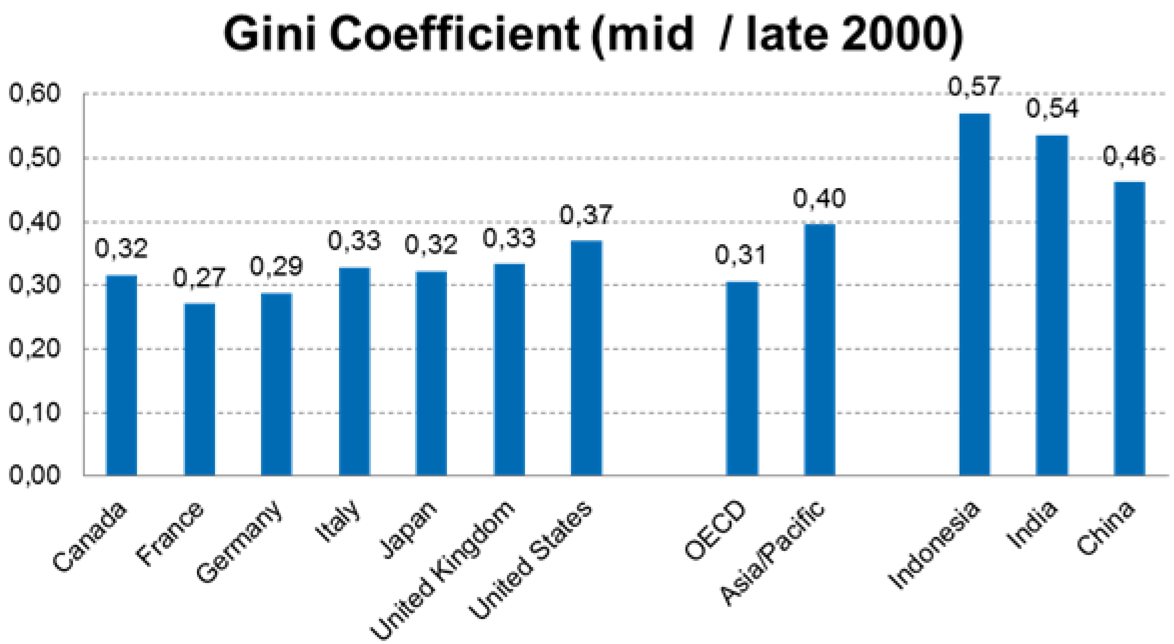
- Economic growth was key for the successful fight against poverty.



- Source: Society At A Glance, Asia/Pacific, OECD, 2011

The Chinese economy – some indicators VI

- Although poverty was significantly reduced overall inequality was not.
  - The Chinese Gini Coefficient increased by 0,05 between mid 90‘s to mid / late 2000‘s.



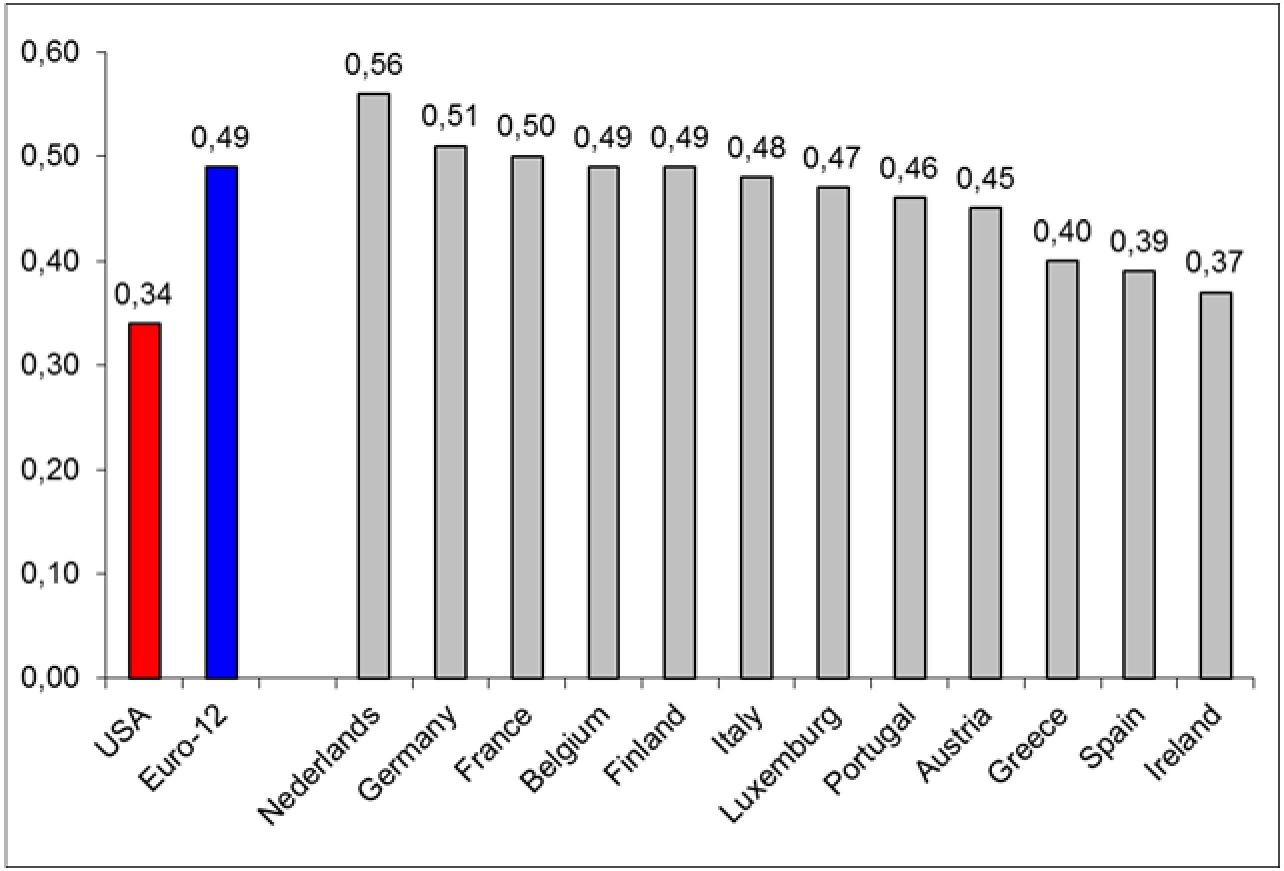
- Source: Society At A Glance, Asia/Pacific, OECD, 2011; Going for Growth, OECD, 2012

Appendix II
Tax reform for a lower volatility of growth

Tax reform for a lower volatility of growth

- Damping the cyclical volatility of growth rates came back into focus due to the severe worldwide recession 2008/2009 following the financial crisis .
- Governments can smooth the volatility by:
  - Recovery programs
  - Let automatic stabilizers work
- Automatic stabilizers consist of:
  - Size of government e.g. number of employees, amount of (constant) expenditure
  - Tax and transfer system
  - To smooth the cyclical volatility with the help of the tax system a progressive tax system that generates a sufficiently large amount of tax revenues is needed.

The size of automatic stabilizers



Interpretation: If GDP decreases by 1 per-centage point public deficit in percent of GDP rises by … percentage points.

These public deficits create income for the private sector.

The larger automatic stabilizers are, the smaller is the need for a recovery program to stabilize growth in a specific country.

Source: Deroose, Servas/Larch, Martin/Schaechter, Andreas, 2008, Constricted, lame and pro-cyclical? Fiscal policy in the euro area revisited, European Economy, Economic Papers 353, published by the European Commission, Brussels.

Public budgets in comparison

	Expenditure			Revenues		
	2009	2010	2011	2009	2010	2011
Netherlands	50,8	50,6	50,0	45,2	45,5	45,0
Germany	48,1	47,9	45,6	44,9	43,6	44,6
United States	44,0	42,1	41,4	30,9	31,7	31,8
Advanced Economies	44,5	43,3	42,7	35,5	35,6	36,1
Emerging Economies	29,7	28,8	28,5	24,9	25,2	26,3
China	23,1	22,5	23,6	20,0	20,2	22,3

- Expenditure and revenues in percent of GDP
- Source: Fiscal Monitor, 2012, IMF
- Note: Before the 2008/2009 recession the US expenditure was at a level of about 36 percent of GDP

Should China rely on automatic stabilizers?

- Emerging economies on average run much smaller public budgets than advanced economies do.
  - The size of the Chinese public budget is even below the average of the emerging economies.
- The Chinese public budget is too small and the tax revenues are too low to hope for a significant stabilization effect coming from the tax system.
- The changes that would be necessary are hard to achieve even in medium terms → this is no option for a tax reform in China.
- If stabilization of economic growth is needed the Chinese goverment should implement a recovery programm.