Centre for Climate Change Economics and Policy

Grantham Research Institute on Climate Change and the Environment

Some economic principles for climate finance

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Key questions for economic analysis

- Private vs. public sources of funding
- How best to raise funds from private sources?
- How best to raise public funds?
  - National governments
  - International agencies
- How do specific proposals rate?

Benchmark case

- Textbook solution
  - Price carbon by global cap and trade
  - Allocate emissions quotas to achieve desired lump sum redistribution
  - Leave the rest to the market
- Real world problems
  - Lack of consensus on science, economics and ethics
  - Multiple market failures => more taxes/subsidies
  - Scepticism about public policy over time

Raising private finance efficiently

- Carbon markets (private) vs. carbon taxation (public)
  - Institutional underpinning needed
- Multiple markets => multiple carbon prices => blurred signals
- Correcting market failures in the provision of finance
- What to do about rents?

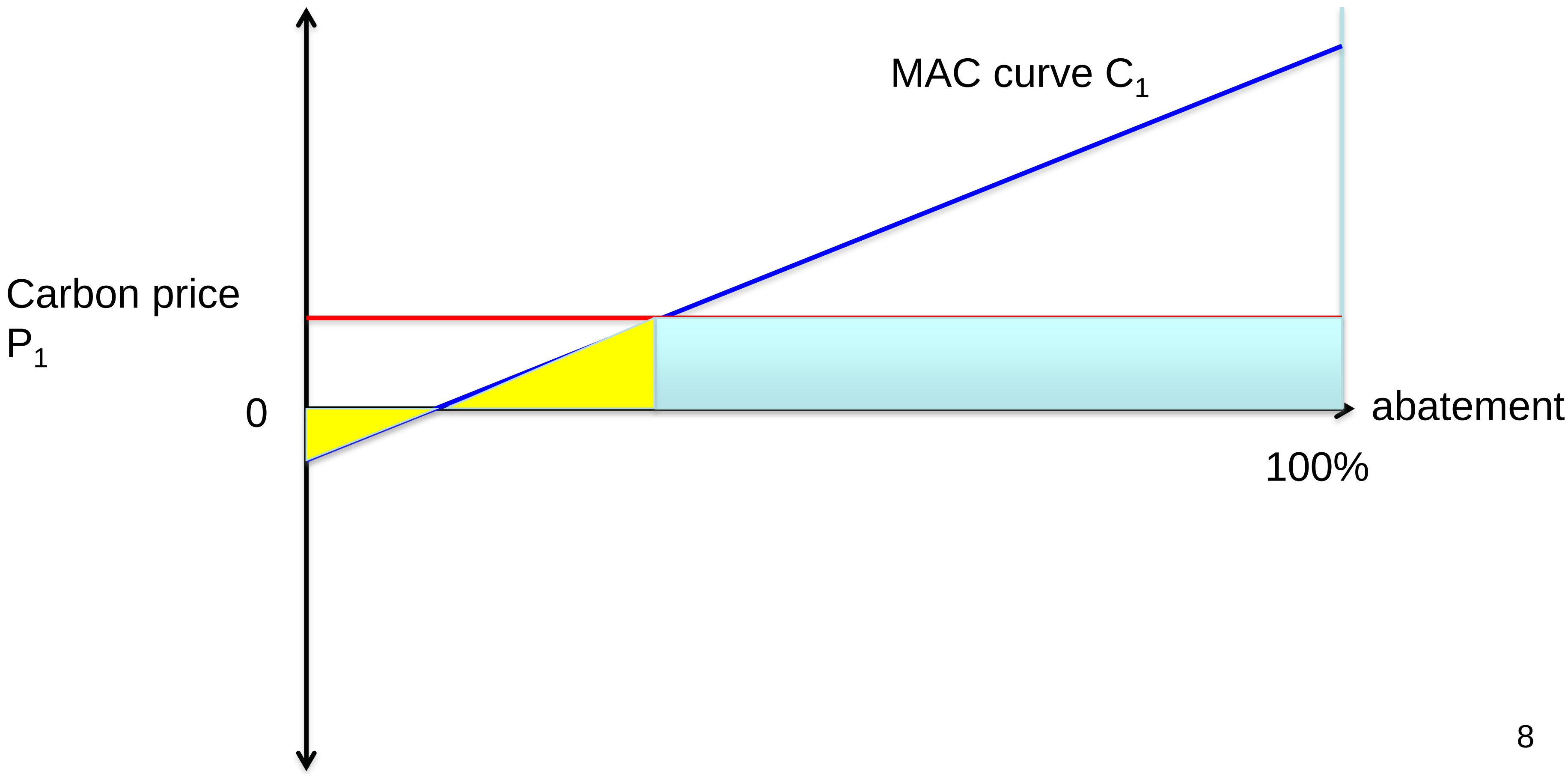
Raising public finance efficiently

- Taxation vs. borrowing
  - Tax to finance current spending
  - Borrow to finance investment
- Tax
  - 'Bads'
  - Goods and services with price-inelastic supply
- Equity
  - Is the current pattern of taxation already fair?

Raising public finance efficiently

- Administration costs (broad base, low tax rate)
- International collaboration (MVR; sources vs. uses; trans-border 'bads')
- Hypothecation
  - Unpopular with finance ministries
  - Possible justifications
    - Information problems
    - 'Binding governments to the mast'
  - Key issue: will funding be commensurate with the problem?

Raising public finance efficiently



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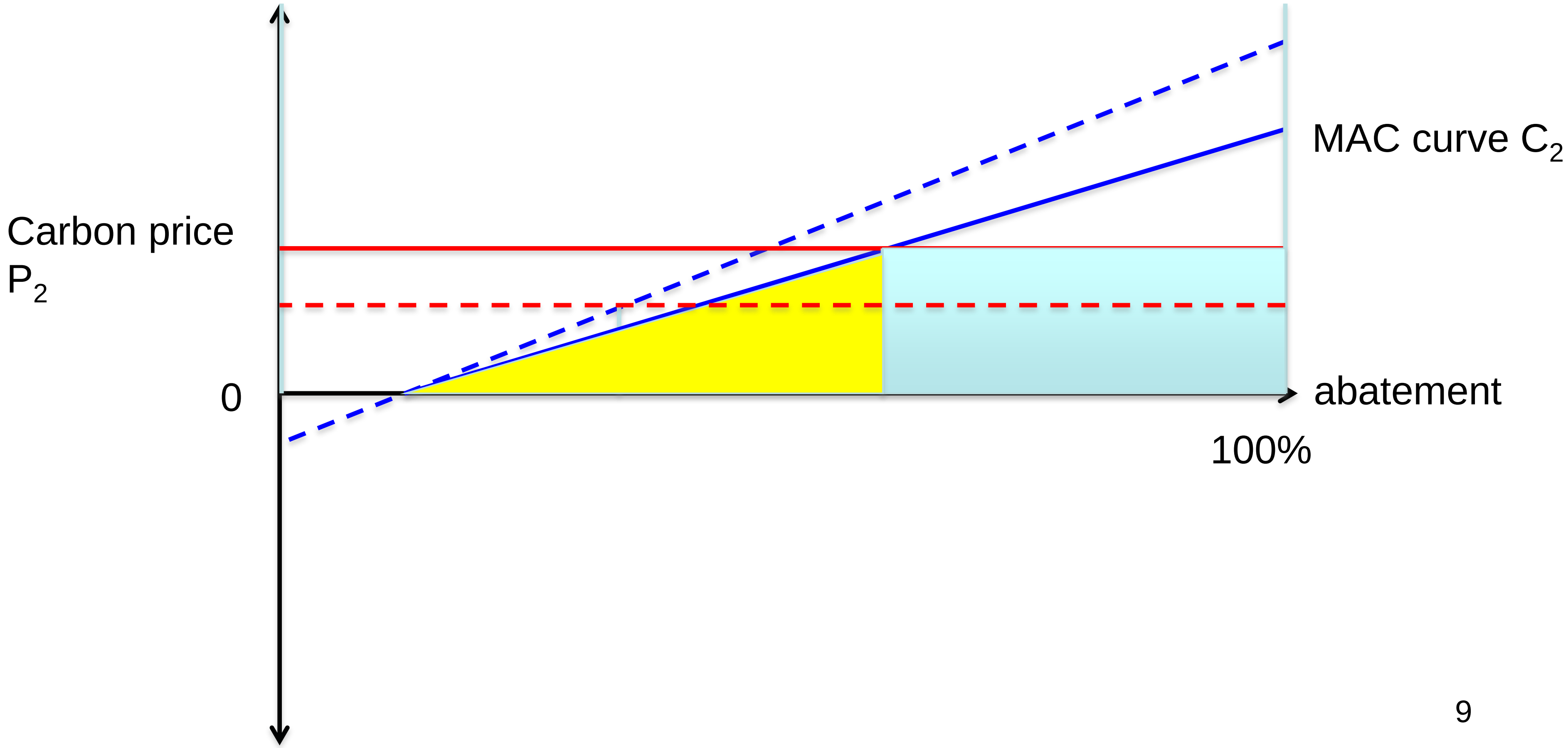
Raising public finance efficiently



Specific proposals

- Develop carbon markets
  - Expand multilateral sources of public funding
    - Climate-related
      - International auctions of emissions quotas
      - Offset levies
      - Marine and aviation bunker fuel levies
    - Non-climate-related
      - International financial institutions and funds
      - Taxes on transnational ‘bads’
      - Financial transactions taxes

Specific proposals

- National government sources
  - National auctions of emissions quotas
  - Carbon taxes
  - Fossil-fuel royalties and subsidies
  - Assessed or indicative contributions

Conclusions

- Important role for private finance. The key incentive is to have pervasive and broadly uniform emissions pricing around the world.
- Dependent on the credibility of the long-term international climate policy framework
- Public finance is warranted by a range of market – and policy – failures associated with climate change and its mitigation.

Conclusions

- Raising tax revenues may be preferable to borrowing as a means of raising public finance for payments to developing countries, although the economics is not clear-cut.
  - Tax ‘bads’
  - Is hypothecation really necessary?
  - The state of the world economy matters

Conclusions

- Problems with proposals
  - How much could or should be raised is very uncertain in most cases
  - Multiple schemes would interact – but how?
  - Several could have untoward consequences for emissions prices
  - Hypothecation is a frequent feature, with very little discussion of whether it is warranted. In many cases, it is clearly not warranted.

Conclusions

- Best proposals judged against this analysis:
  - Expanding the scale and scope of the CDM
  - Expanding the use of IFIs' balance sheets, including the use of SDRs
  - However, in both cases, governance arrangements are subject to controversy
- Some good ideas for sensible new taxes – but why earmark for climate change finance?

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Thank you for your attention

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