

Statistical recording of emission permits (under cap and trade)

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Main issues to address from government perspective

- Creation of “rights” and “obligations”
 - From supra-national (Kyoto etc) down
 - Proliferation of assets...potentially huge amounts
 - Market trading of instruments (remote from government)
- Cash received for permits
 - Possibly irregular auctions, but regular surrender
- Cross-border schemes
 - Permits released by one government surrendered to another (but no settlements system)

Statistical background to emission permits

- Starting point is international statistical standards (SNA 2008)
 - SNA treats payments for such permits as taxes on production
 - Tax to be recorded in principle at time of economic event underlying it (in this case: pollution); no anticipation of future production
 - No government asset for the right to issue permits
- Two key questions :
 - What type of asset/liability is an emission permit?
 - At what value should the tax be recorded?

Choices...

■ Nature of the asset:

- Recording as financial asset (= govt liability)
- Recording as non-financial asset (no liability)

■ Valuation of tax revenue:

- Record revenue corresponding to market price of the permit (=enterprise view)
- Record revenue only corresponding to cash originally paid for permit (tax revenues = cash, just time adjusted)

Result of discussions

- International statistical decision end-February 2012
- Emission permit is made up of two types of asset:
 - Financial asset for the cash auction proceeds (prepayment of tax); liability for government.
 - Non-financial (intangible) asset for the changes in market value of permit after issue; value disappears on surrender
- In effect this separates government accounts from impact of trading of permits
 - Permits issued for free not recorded in government accounts (no grants, no liabilities)
 - Government revenue equal to cash received (time adjusted)

Cross-border issues

- International level recording not adopted
- Since permits can freely cross borders and be surrendered in another country, but no govt to govt settlements, possible imbalances
- For simplicity, general assumption in model that permits surrendered in country x were also issued in country x

Practical issues

- In principle, would follow individual permits from birth to death...but challenges if register of permits not available or incomplete.

- In practice, use a model:

TAX = No.Surrendered Permits * Average auction price per permit

AUCTION PRICE = Unused auction proceeds / live permits