INDIRECT TAXES

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TYPES OF INDIRECT TAXATION

- Direct versus indirect taxes
- General sales & companion use taxes
  - Retail sales tax & tax on resident purchases in other jurisdictions
  - Usually subnational (state and/or local)
- Value added tax (VAT)
  - Also a general tax on consumption
  - Tax on difference between value of sales and value of purchased (non-labor) inputs from other firms at each stage of production
  - Usually national
- Excise taxes
  - Selective taxes on specific goods and services
  - Commonly referred to as "luxury" and "sin" taxes
  - Often levied on fuel as well
  - Any level of government
- [Trade taxes]

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GENERAL SALES TAX AND COMPANION USE TAX

- Seldom tax total consumption
- Usually applied at the retail stage
- Adhere to the destination principle
- Have both income and price effects
- Important equity considerations

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ELECTRONIC COMMERCE: ISSUES

- Legal obligation of on-line retailers to pay the tax
- Perspective of internet buyers?
- Impact on local government finance?
- Unfair competition with traditional businesses?

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ELECTRONIC COMMERCE: OPTIONS

- Maintain the status quo
- Ban internet taxation
- Collect taxes on out-of-state sales
- Eliminate the sales tax

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Streamlined State Status 10-01-12

- Full Member States
- Associate Member States – flex to full
- Advisory States – Not Conforming
- Non-sales tax states
- Project states – Not Advisory
- Non-participating state

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EXCISE TAXES

- ***Examples***: Tobacco products, alcohol, perfume, yachts, gasoline
- ***Extremely prevalent***: Demand relatively inelastic, little popular resistance, administration relatively easy → cause minimum economic distortion, seen as fair, raise significant revenue
- ***Economically efficient***: Inelastic demand, lack of close substitutes, correct for negative externalities → little if any deadweight loss, double dividend (raise revenue + discourage socially costly behavior)
- ***Socially equitable***: Regressive consumption tax, but taxing social "bads" → "sin" tax seen as fair and "luxury" tax has appearance of improving vertical equity (perception > reality)
- ***Administratively cost-effective***: Easy to define, restricted/regulated markets, large sales volume with few producers, tax handles in production facilities like breweries and cigarette factories (excise duty stamps) → low administrative and compliance costs
- Trade-offs between ***specific vs. ad valorem*** models
- Trade-offs between ***revenue and regulation*** objectives

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ALTERNATIVE TAXES ON BUSINESSES

- Gross receipts tax/turnover tax
  - Tax on total revenue
  - Proxy for income tax
  - Usually subnational
- Value added tax (VAT)
  - Difference between output value (sales) and input value (cost of production)
  - Gross income VAT (tax base = GDP)
  - Net income VAT (tax base = PIT)
  - ***Consumption VAT (tax base = retail sales tax)***
    - Essentially a retail sales tax with tax collection in installments at every stage of production and distribution in proportion to the value added by each firm at each stage
    - Analogous to income tax withholding on wages, interest, dividends, etc.

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Alternative Business Tax Bases

Type	Subtraction Base	Additive Base	Tax Base
Gross Y (Receipts)	Revenue	Purchases + Wages + Depr. + i + Rent + π	a * GDP, a > 1
Value Added, Gross Y	Revenue – Purchases of Materials	Wages + Depr. + i + Rent + π	GDP
Value Added, Net Y	Revenue – Purchases of Materials – Depr.	Wages + i + Rent + π	National Income
Value Added, Consumption	Revenue – Purchases of Materials – Capital Purchases	Wages + i + Rent + π + Net Investment	Consumption
Net Y (Profits)	Revenue – Purchases of Materials – Wages – i – Rent – Depr.	π	π or ROI

Source: Adapted from Ronald Fisher, *State and Local Public Finance*, 3rd ed., Table 17-2.

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Tax Bases and Production Stages

	Farmer	Miller	Baker	Oven	Steel	Total
Sales	$100	$500	**$2,000**	$500	$200	$3,300
Materials	0	100	**500**	200	0	800
Capital Goods	0	0	**500**	0	0	500
Gross Receipts Tax @ 10%	*10*	*50*	***200***	*50*	*20*	*330*
VA, Gross Y	100	400	**1,500**	300	200	2,500
Gross Y VAT @ 10%	*10*	*40*	***150***	*30*	*20*	*250*
Depreciation	0	0	**100**	0	0	100
VA, Net Y	100	400	**1,400**	300	200	2,400
Net Y VAT @ 10%	*10*	*40*	***140***	*30*	*20*	*240*
VA, Consumption	100	400	**1,000**	300	200	2,000
Cons. VAT @ 10%	*10*	*40*	***100***	*30*	*20*	*200*
Profit	8	40	**160**	40	16	264
Profit Tax @ 10%	*0.8*	*4*	***16***	*4*	*1.6*	*26.4*

Source: Adapted from Ronald Fisher, *State and Local Public Finance*, 3rd ed., Table 17-3.

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VAT CALCULATION

- Addition method
  - Compute VAT by adding up all input costs (wages, interest, profits, etc.) to get taxable value added, & then multiplying by the VAT rate
  - Not popular because of information requirements
  - Like a payroll tax and a CIT
- Subtraction method
  - Compute VAT by subtracting input value from output value to get taxable value added, & then multiplying by the VAT rate
  - Usually used for those with incomplete or inaccessible accounting
- Invoice (credit) method
  - Compute VAT by subtracting VAT paid on inputs from VAT due on outputs
  - Most widely used because relatively simply if accounting credible
  - Incentive to document transactions (good audit trail)

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VAT CALCULATION (1)

Example of credit method: 10% VAT, flat rate, all stages

Paul Bunyon Co. sells timber at $100 + $10 VAT
VAT = $10

Handcraft Co. buys timber at $110
Then produces chair and sells it at $200 + $20 VAT
VAT = $10 ($20 - $10 VAT paid on input)

Furniture Plaza buys the chair at $220
Then resells at $300 + $30 VAT
VAT = $10 ($30 - $20 VAT paid on input)

Total VAT = $10 + $10 + $10 = $30

Source: Adapted from Vu Thanh Tu Anh, FETP

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VAT CALCULATION (2)

Example of subtraction method: 10% VAT, flat rate, all stages

Paul Bunyon Co. sells timber at $100
Input price = $0 → VA = $100 - $0 = $100
VAT = $100 * 10% = $10

Handicraft Co. buys timber at $100
Makes & sells chair at $200 → VA = $200 - $100 = $100
VAT = $100 * 10% = $10

Furniture Plaza buys the chair at $200
Resells at $300 → VA = $300 - $200 = $100
VAT = $100 * 10% = $10

Total VAT = $10 + $10 + $10 = $30

Source: Adapted from Vu Thanh Tu Anh, FETP

EXEMPTION vs. ZERO RATED

- A unit that is <u>exempt</u> is not required to pay tax on sales, but is also not eligible for a tax credit
- A unit that is <u>zero rated</u> (subject to 0% tax rate) is not required to pay tax on sales, but is eligible for a tax credit
- When an <u>intermediate unit is exempt</u>, and thus left out of the value chain: the entire refund chain is interrupted; the audit trail is broken; total tax liability is increased; and it is difficult to introduce the tax (remove exemption) later
- When an <u>intermediate unit is zero rated</u>: the entire refund chain is not interrupted; the audit trail is unbroken; total tax liability will not change; the incentive for voluntary compliance remains; <u>but</u> VAT on all previous stages is excluded, so a zero tax rate on the last stage will cancel out revenue via the refund structure

VAT AND CROSS-BORDER TRANSACTIONS

- Using the origin principle (tax levied where produced)
  - VA of exports is part of the exporter's tax base → exports taxed
  - Trade surplus will expand the tax base
- Using the destination principle (tax levied where consumed)
  - VA of exports is part of the importer's tax base → imports taxed
  - Trade surplus will reduce the tax base
- Most VAT countries follow the destination principle
  - Traded goods do not include the VAT of exporters
  - Tax adjustment made at the border is less costly
  - No need to re-adjust traded goods at the border for VAT purposes
- Agreement is needed to share tax revenue among trading countries, especially when using the origin principle

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RETAIL SALES TAX VS. VAT

- Retail sales tax weaknesses in the United States
  - Low rate ceiling before it is not feasible
  - All revenue at risk at single stage
  - Audit/invoice trail not strong
  - Revenue not secured at easiest stage
  - Excludes much of potential tax base
- VAT weaknesses in the United States
  - Local government: usurps state and local tax
  - Liberals: regressive
  - Conservatives: supports big government
  - Liberals & conservatives: inflationary
  - Federal & state: administrative nightmare
- Differences between VAT and sales tax exaggerated, VAT implementation problems understated

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