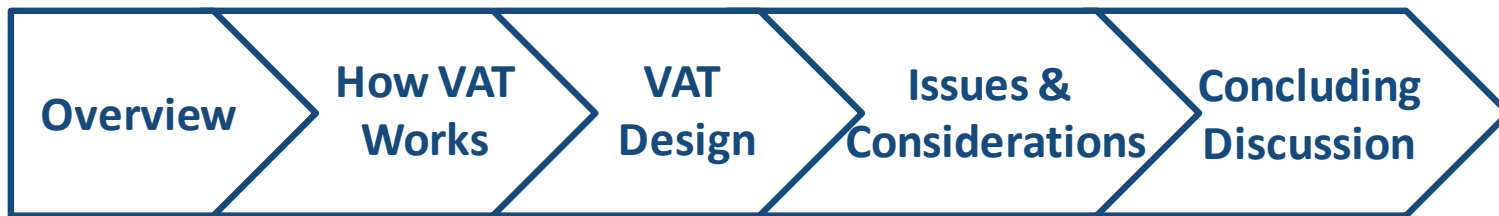


# Value Added Tax Overview

Preston Brashers  
Department of Revenue  
July 17, 2020

# Presentation Preview



# Overview

## Understanding Value Added Tax

- ▶ A value add tax (VAT) is a tax that is imposed on sellers on the value of products created at each stage throughout the product chain
- ▶ A business's value added is the difference between revenues generated from its sales to customers and the price of inputs purchased from other businesses

# Overview

## Tax on the Returns on Labor and Capital

A business's two key inputs are labor and capital

Businesses organize and utilize labor and capital to create goods and services of greater value than the original cost of purchased capital inputs

The value created by the business is divided between:

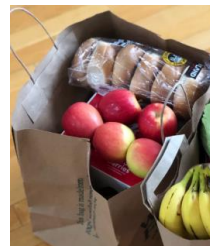
- ▶ The return on labor (wages)
- ▶ The return on capital (profits, interest paid, reinvested capital)

# How Value Added Tax Works



	Fisher	Manufacturer	Wholesaler	Retailer	Consumer	Total
Sales (before VAT)	\$200	\$600	\$700	\$900	-	
Purchases	-	\$200	\$600	\$700	\$900	
Value Added	\$200	\$400	\$100	\$200	-	\$900

# How Value Added Tax Works

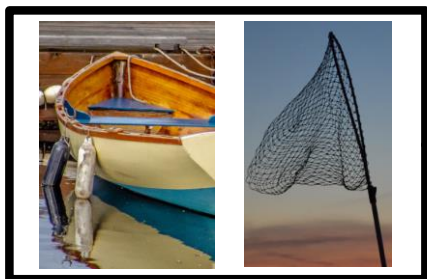


	Fisher	Manufacturer	Wholesaler	Retailer	Consumer	Total
Sales (before VAT)	\$200	\$600	\$700	\$900	-	
Purchases	-	\$200	\$600	\$700	\$900 + \$90 VAT	
Value Added	\$200	\$400	\$100	\$200	-	\$900
10% VAT	\$20	\$40	\$10	\$20	-	\$90

# How Value Added Tax Works

## Fisher

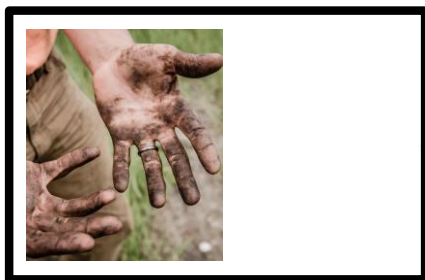
Capital: \$0



Output: \$200

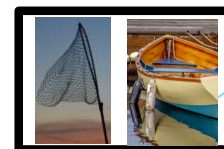


Labor



Sales:	\$200
<u>Cost of Goods Sold:</u>	<u>\$0</u>
Gross Profit:	\$200
<u>Deductible Operating Expenses:</u>	<u>\$0</u>
Value Added:	\$200

Sole Prop Income:  
\$200



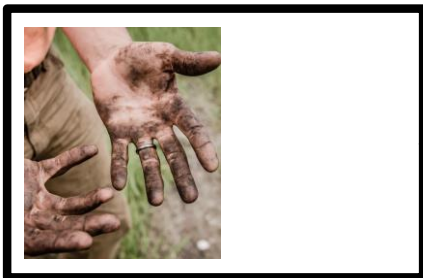
# How Value Added Tax Works

## Manufacturer

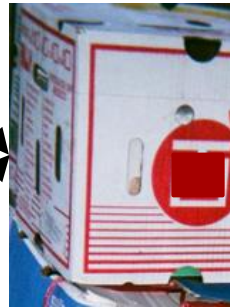
Capital: \$200



Labor

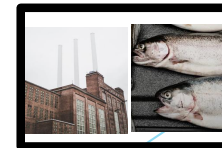


Output: \$600



Sales:	\$600
<u>Cost of Goods Sold:</u>	<u>\$100</u>
Gross Profit:	\$500
<u>Deductible Operating Expenses:</u>	<u>\$100</u>
<b>Value Added:</b>	<b>\$400</b>

Loan Interest: \$50	Wages: \$150
Profit (Dividends): \$150	Benefits: \$50





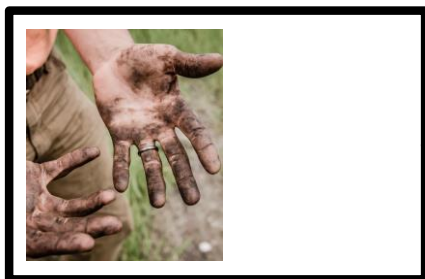
# How Value Added Tax Works

## Wholesaler

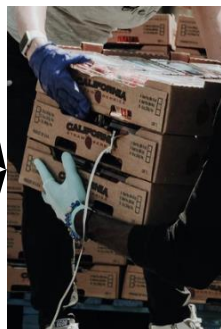
Capital: \$600



Labor



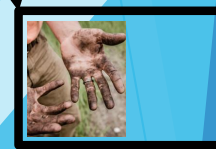
Output: \$700



Depreciable Assets (CAPEX): \$50



Wages: \$50

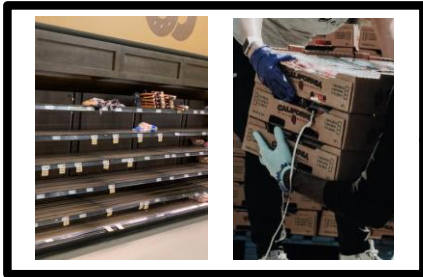


Sales:	\$700
<u>Cost of Goods Sold:</u>	<u>\$400</u>
Gross Profit:	\$300
<u>Deductible Operating Expenses:</u>	<u>\$200</u>
Value Added:	\$100

# How Value Added Tax Works

## Retailer

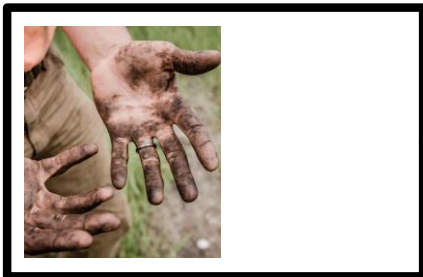
Capital: \$700



Output: \$900



Labor

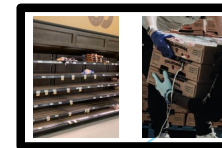


Sales:	\$900
<u>Cost of Goods Sold:</u>	<u>\$600</u>
Gross Profit:	\$300
Change in Inventory:	\$50
<u>Deductible Operating Expenses:</u>	<u>\$50</u>
<b>Value Added:</b>	<b>\$200</b>

Loan Interest: \$100

Wages: \$200

Partnership Profit: **-\$100**



# How Value Added Tax Works

## Comparison of Tax Bases

Business	Capital Purchases	Sales	Profits, Interest, CAPEX	Wages, Comp.	TAX BASES			
					Gross Receipts Tax	Retail Sales Tax	Corp/ Net Receipt Tax*	VAT
Fisher	-	\$200	-	\$200	\$200	-	-	\$200
Manufacturer	\$200	\$600	\$200	\$200	\$600	-	\$138	\$400
Wholesaler	\$600	\$700	\$50	\$50	\$700	-	\$36	\$100
Retailer	\$700	\$900	-	\$200	\$900	\$900	-	\$200
<b>Total</b>	<b>\$1,500</b>	<b>\$2,400</b>	<b>\$250</b>	<b>\$650</b>	<b>\$2,400</b>	<b>\$900</b>	<b>\$174</b>	<b>\$900</b>

\*As a sole proprietor, fisher faces no corporate income/net receipts tax

\*Assumes deductible depreciation equals 2% of Sales

\*Assumes interest is 100% deductible

# How Value Added Tax Works

## Comparison of Tax Bases

Business	Capital Purchases	Sales	Profits, Interest, CAPEX	Wages, Comp.	TAX BASES			
					Gross Receipts Tax	Retail Sales Tax	Corp/ Net Receipt Tax*	VAT
Fisher	-	8%	-	31%	8%	-	-	22%
Manufacturer	13%	25%	80%	31%	25%	-	79%	44%
Wholesaler	40%	29%	20%	8%	29%	-	21%	11%
Retailer	47%	38%	-	31%	38%	100%	-	22%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\*As a sole proprietor, fisher faces corporate income/net receipts tax

\*Assumes deductible depreciation equals 2% of Sales

\*Assumes interest is 100% deductible

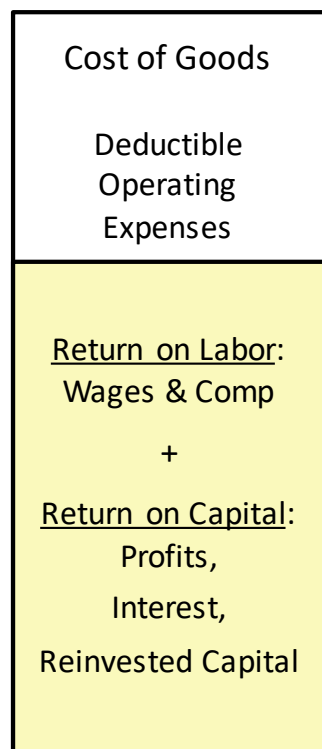
# How Value Added Tax Works

## Comparison of Tax Bases

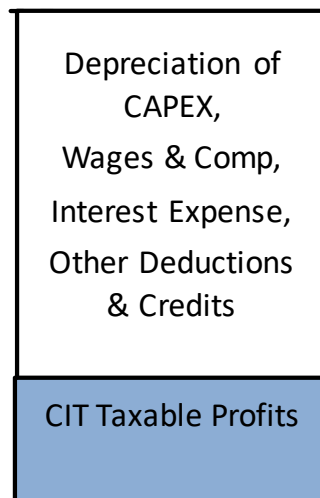
### Gross Receipts Tax



### Value Added Tax



### Corporate Income/ Net Receipts Tax



# How Value Added Tax Works

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## Initial Takeaways

Although the form of the VAT has the appearance of a business tax, a broad, destination-based VAT is considered a consumption tax, borne by consumers

In theory, such a VAT and a similarly broad-based Retail Sales Tax (RST) have very similar tax bases

(In practice, there are some differences between a VAT and RST tax base)

The VAT does not suffer from the tax pyramiding effect of a gross receipts tax, where downstream businesses pay tax on value that was added by businesses upstream in the product chain

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# VAT Design

## Credit-Invoice Method vs. Subtraction Method

### Credit-Invoice Method

- By far the most common form of VAT
- Transactional
- Businesses subject to VAT register
- Sales are taxed at each stage of production
- Sellers provide buyers with a VAT invoice
- Buyers (except final consumer) can claim a credit on VAT paid by suppliers
- Sales to out-of-state customers exempt

### Subtraction Method

- Most prominent recent example is Japan
- Based on annual/periodic accounts
- Businesses are taxed on the difference between non-exempt sales and non-exempt purchases in the period
- Taxing jurisdictions may encourage/ require VAT invoicing
- Apportionment of in-state vs. out-of-state sales/purchases

# VAT Design

## Credit-Invoice Method vs. Subtraction Method

### Credit-Invoice Method

- Audit trail
- Higher voluntary compliance
- Relatively more attractive if VAT tax rate is high

### Subtraction Method

- Lower compliance cost (taxpayers)
- Lower administrative cost (state)
- Relatively more attractive if VAT tax rate is low



# Issues & Considerations

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## **Cross-Border Transactions**

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The subtraction method VAT may be destination-based or origin-based, depending on apportionment

Based on current Washington tax structure, we assume that VAT apportionment would be based on in-state vs. out-of-state sales ratio (i.e., destination based)

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# Issues & Considerations

## Cross-Border Transactions: Destination-based VAT

<u>Seller 1</u>		<u>Consumer</u>	<u>Total Price to Consumer</u>
<b>WA</b>	100 + 10 VAT	<b>WA</b>	110
<b>OR</b>	100 + 10 VAT	<b>WA</b>	110
<b>WA</b>	100	<b>OR</b>	100

# Issues & Considerations

## Cross-Border Transactions: Destination-based VAT

<u>Seller 1</u>		<u>Seller 2</u>		<u>Consumer</u>	<u>Total Price to Consumer</u>
WA	100 + 10 VAT	WA	100 + 10 VAT	WA	220
OR	100	OR	100 + 10 VAT	WA	210
WA	100 + 10 VAT	WA	100	OR	210

# Issues & Considerations

## Cross-Border Transactions: Destination-based VAT, Tracking State of Purchase

<u>Seller 1</u>		<u>Seller 2</u>		<u>Consumer</u>	<u>Total Price to Consumer</u>
<b>WA</b>	100 + 10 VAT	<b>WA</b>	100 + 10 VAT	<b>WA</b>	220
<b>OR</b>	100	<b>OR</b>	100 + 20 VAT	<b>WA</b>	220
<b>WA</b>	100 + 10 VAT	<b>WA</b>	100 - 10 VAT	<b>OR</b>	200

# Issues & Considerations

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## **Depreciable Assets**

Capital expenditures on assets that are depreciable over more than one year are not deductible under the proposed VAT

In this way, VAT cannot be avoided by “reinvesting profits”

However, Gates (2002) suggested deductions for capital expenditures or depreciation as a potential mechanism to increase competitiveness of Washington businesses

# Issues & Considerations

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## **Exemptions**

Gates (2002) did not propose exemptions on specific entities/activities, but did not rule out limited exemptions

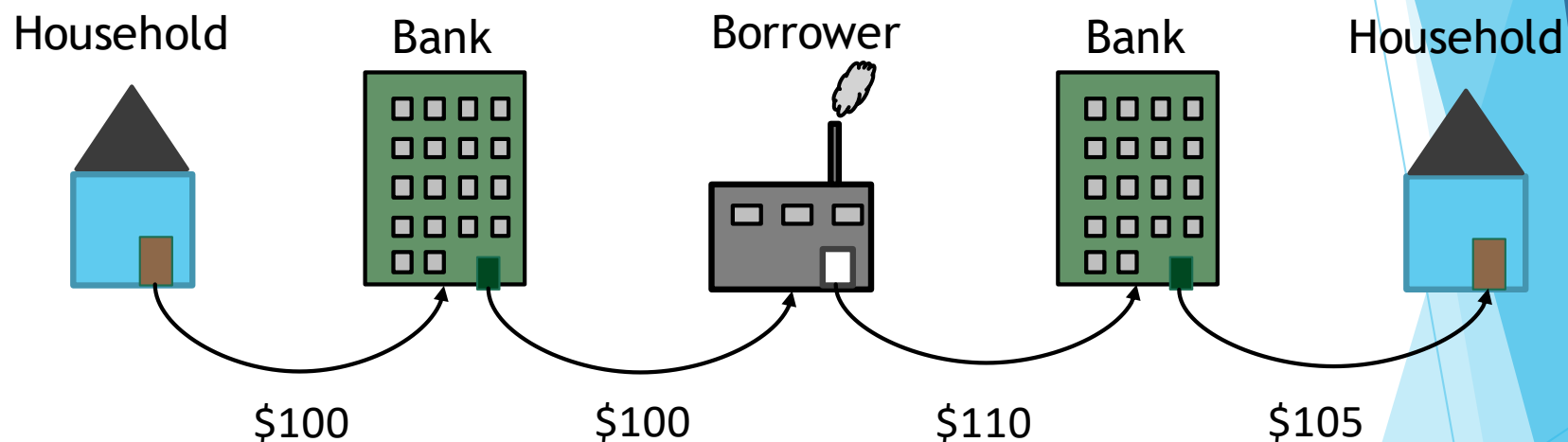
In practice, all existing VATs exempt certain activities

Common exemptions include:

- Medical services
- Social services
- Government
- Education
- Real estate
- Financial services

# Issues & Considerations

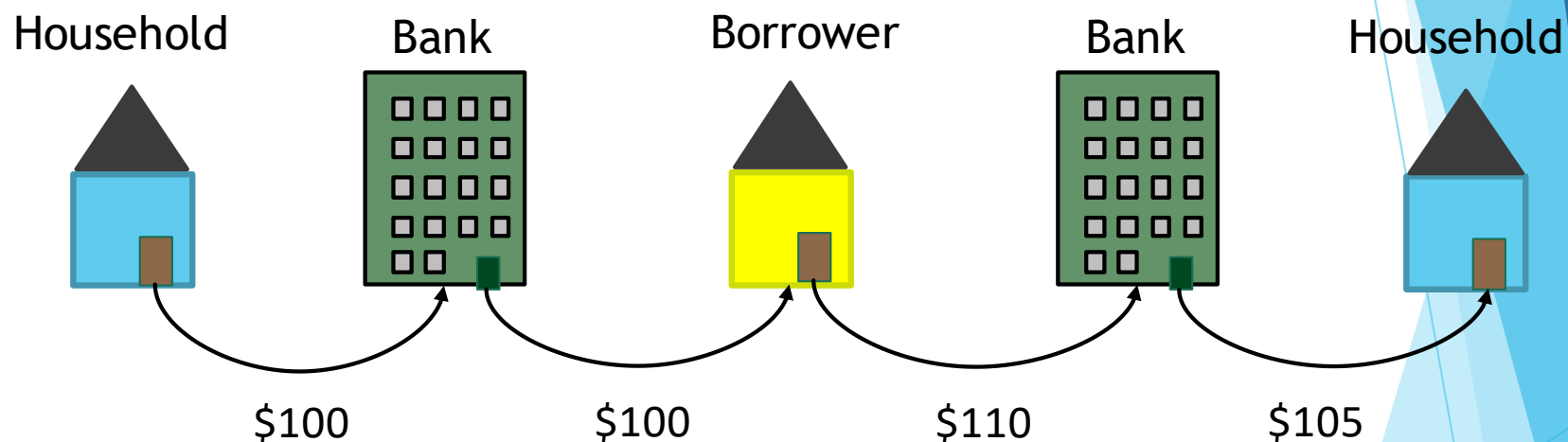
## Financial Services: Banking & Lending



- The borrower paid VAT on its value added, with no interest deduction
- Thus, taxing the bank may lead to double taxation

# Issues & Considerations

## Financial Services: Banking & Lending



- If borrower is another household, exempting bank from VAT leaves some value added untaxed
- What portion of financial services companies' returns relate to: 1) Investment income, 2) Time value of money, 3) Inflation, 4) Hedging/risk mitigation, 5) Other services



Questions for us?

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