

THE HOME DEPOT, INC.
CONSOLIDATED BALANCE SHEETS

	January 30, 2022	January 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,343	\$ 7,895
Receivables, net	3,426	2,992
Merchandise inventories	22,068	16,627
Other current assets	1,218	963
Total current assets	29,055	28,477
Net property and equipment	25,199	24,705
Operating lease right-of-use assets	5,968	5,962
Goodwill	7,449	7,126
Other assets	4,205	4,311
Total assets	\$ 71,876	\$ 70,581
Liabilities and Stockholders' Equity		
Current liabilities:		
Short-term debt	\$ 1,035	\$ —
Accounts payable	13,462	11,606
Accrued salaries and related expenses	2,426	2,463
Sales taxes payable	848	774
Deferred revenue	3,596	2,823
Income taxes payable	158	193
Current installments of long-term debt	2,447	1,416
Current operating lease liabilities	830	828
Other accrued expenses	3,891	3,063
Total current liabilities	28,693	23,166
Long-term debt, excluding current installments	36,600	35,822
Long-term operating lease liabilities	5,353	5,356
Deferred income taxes	900	1,131
Other long-term liabilities	2,013	1,807
Total liabilities	73,572	67,282
Common stock, par value \$0.05; authorized: 10,000 shares; issued: 1,792 shares at January 30, 2022 and 1,789 shares at January 31, 2021; outstanding: 1,035 shares at January 30, 2022 and 1,077 shares at January 31, 2021	90	89
Paid-in capital	12,132	11,540
Retained earnings	67,580	58,134
Accumulated other comprehensive loss	(704)	(671)
Treasury stock at cost, 757 shares at January 30, 2022 and 712 shares at January 31, 2021	(80,794)	(65,793)
Total stockholders' (deficit) equity	(1,696)	3,299
Total liabilities and stockholders' equity	\$ 71,876	\$ 70,581

See accompanying notes to consolidated financial statements.

Balance Sheet

Cash
Accounts Receivable
Merchandise Inventories
Other Current Assets
Goodwill
PP&E/Operating lease/other
Short-term debt
Accounts Payable
Accrued Salaries and Related Exp
Sales taxes payable
Deferred Revenue
Income taxes
Long term debt/Other
Deferred Income tax
Operating lease liability

Analyzing Fiscal
Year Ended 2
A.Y-X

THE HOME DEPOT, INC.
CONSOLIDATED STATEMENTS OF EARNINGS

	Fiscal 2021	Fiscal 2020	Fiscal 2019
Net sales	\$ 151,157	\$ 132,110	\$ 110,225
Cost of sales	100,325	87,257	72,653
Gross profit	50,832	44,853	37,572
Operating expenses:			
Selling, general and administrative	25,406	24,447	19,740
Depreciation and amortization	2,386	2,128	1,989
Total operating expenses	27,792	26,575	21,729
Operating income	23,040	18,278	15,843
Interest and other (income) expense:			
Interest and investment income	(44)	(47)	(73)
Interest expense	1,347	1,347	1,201
Interest and other, net	1,303	1,300	1,128
Earnings before provision for income taxes	21,737	16,978	14,715
Provision for income taxes	5,304	4,112	3,473
Net earnings	\$ 16,433	\$ 12,866	\$ 11,242
Basic weighted average common shares	1,054	1,074	1,093
Basic earnings per share	\$ 15.59	\$ 11.98	\$ 10.29
Diluted weighted average common shares	1,058	1,078	1,097
Diluted earnings per share	\$ 15.53	\$ 11.94	\$ 10.25

See accompanying notes to consolidated financial statements.

Income Statement
Net Sales
Cost of Sales
SG and A Exp
Other Exp
Tax Expense

Change in account

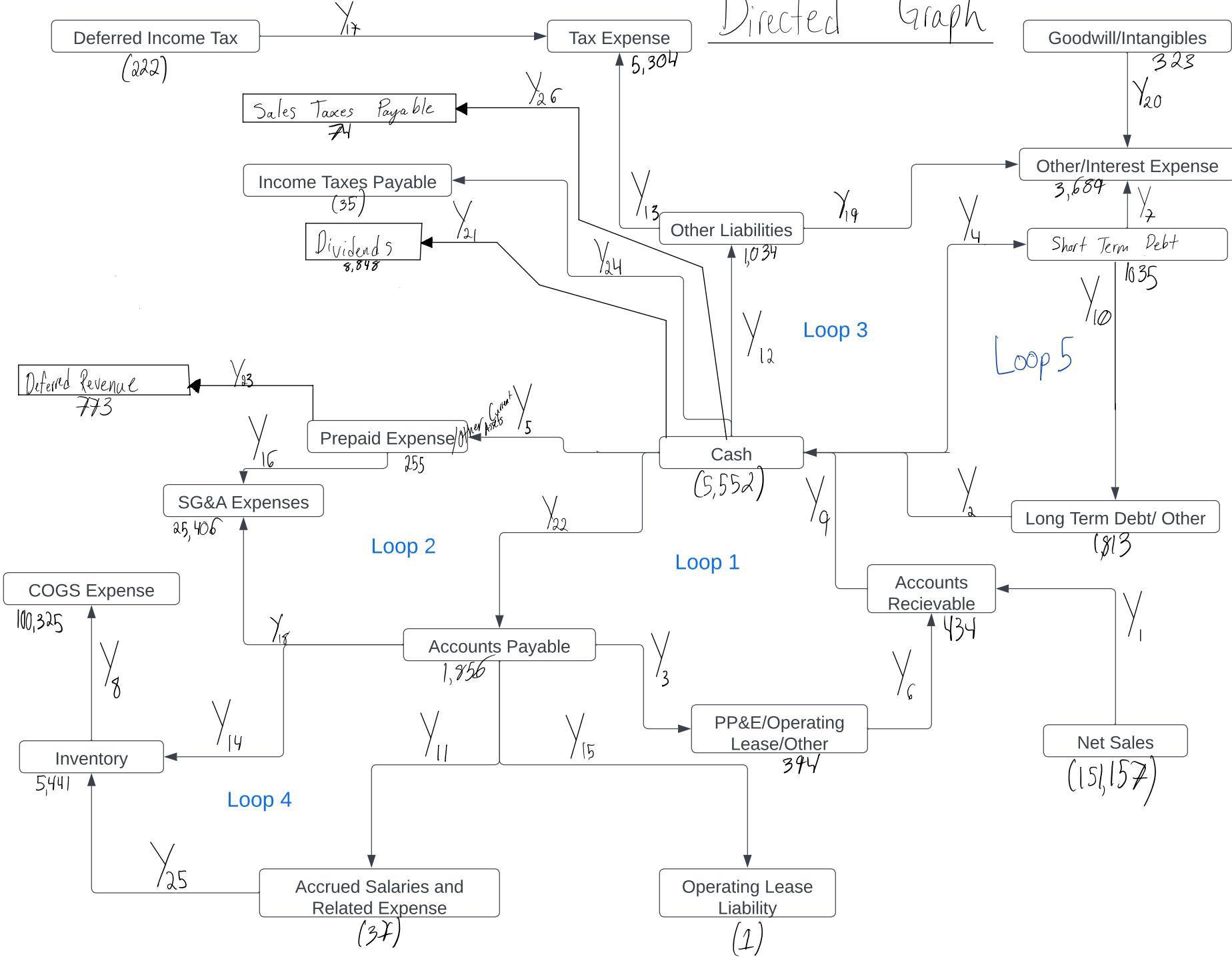
1 Δ Cash	(5552)
2 Δ Accounts Receivable	434
3 Δ Merchandise Inventories	5,441
4 Δ Other Current Assets	255
5 Δ Goodwill	323
6 Δ PP&E/Operating Lease/Other	394
7 Δ Short-term debt	1035
8 Δ Accounts Payable	1,856
9 Δ Accrued Salaries and Related Exp	(37)
10 Δ Sales taxes payable	74
11 Δ Deferred Revenue	773
12 Δ Income taxes payable	(35)
13 Δ Operating lease liability	(1)
14 Δ Long term debt	1,813
15 Δ Other Liabilities	1,034
16 Δ Deferred income tax	(222)
17 Δ Net sales	(151,152)
18 Δ Cost of sales	100,325
19 Δ SG&A Expense	25,406
20 Δ Other/Interest Expense	3,689
21 Δ Tax Expense	5,304
22 Δ Dividends	8,848

X
-46
646
46
-646

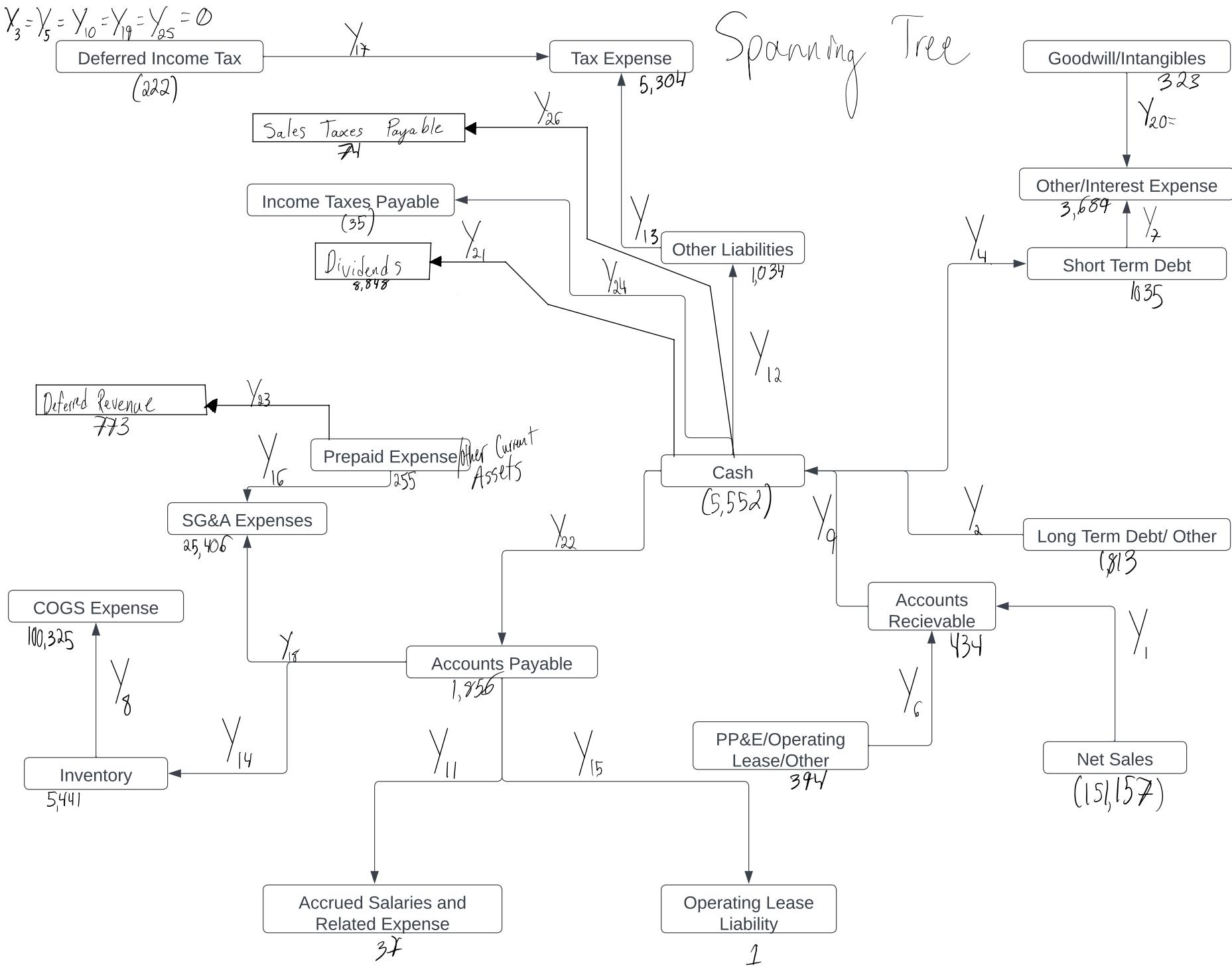
Transactions:

- γ_1 - Product sold (credit Net sales, Debit Receivables)
 γ_2 - New long term debt issued (credit longterm debt/other, debit cash)
 γ_3 - Purchase of PP and E (credit Accounts payable, Debit PPE)
 γ_4 - Notes paid (Credit Cash, Debit Short term Debt)
 γ_5 - Early payment of expenses (credit cash, Debit prepaid expenses)
 γ_6 - Sale of PP and E (credit PP and E, Debit Accts Receivable)
 γ_7 - Interest paid on longterm loans (credit Notes Payable, Debit Other Expenses)
 γ_8 - Cost of Goods sold recorded (credit Inventory, Debit COGS Exp)
 γ_9 - Receivables collected (credit receivables, debit cash)
 γ_{10} - Realization of short-term debt (Credit Short-term Debt, Debit long-term debt)
 γ_{11} - Realization of Accrued Salaries and Related Exp (credit Accounts Payable, Debit Accrued Salaries and Related Expense)
 γ_{12} - Payment of other Liabilities (credit cash, Debit other liabilities)
 γ_{13} - Payment of Income Taxes (Credit Other Liabilities, Debit Tax Expense)
 γ_{14} - Purchasing of Inventory (Credit Accounts Payable, Debit Inventory)
 γ_{15} - Payment of Operating Lease (Credit Accounts Payable, Debit operating lease (liability))
 γ_{16} - SG and A Expenses prepaid (Credit Prepaid expenses, Debit SG and A Expenses)
 γ_{17} - Payment of Income Taxes (Credit Deferred Income Tax, Debit Tax Expense)
 γ_{18} - SG and A Expenses paid on account (Credit Accounts Payable, Debit SG and A Expenses)
 γ_{19} - Interest Paid to debt holders (Credit Other Liabilities, Debit Other Expenses)
 γ_{20} - Impairment of Goodwill/Intangibles (Credit Goodwill/Intangibles, Debit Other/Interest Expense)
 γ_{21} - Dividends paid (Credit Cash, Debit Dividends)
 γ_{22} - Accounts Payable paid (Credit Cash, Debit Accounts Payable)
 γ_{23} - Rent Payment Received in advance (Credit Other Assets, Debit Deferred Revenue)
 γ_{24} - Payment of Income taxes (Credit Cash, Debit Income taxes Payable)
 γ_{25} - Realization of Accrued Salaries and Related Exp into inventory (Credit Accrued Salaries and Related Expense, Debit Inventory)
 γ_{26} - Payment of Sales Tax (Credit Cash, Debit Sales Taxes Payable)

Directed Graph



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A =	1	0	1	0	-1	0	0	1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22x26	2	1	0	0	0	1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	-1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	0	1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	1	0	0	-1	0	0	-1	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0
	8	0	0	-1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	14	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0
	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0
	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0
	17	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0



Known

$$Y_1 = 151,157$$

$$Y_2 = -1,813$$

$$Y_6 = -394$$

$$Y_8 = 100,325$$

$$Y_{11} = -37$$

$$Y_{15} = -1$$

$$Y_{17} = 222$$

$$Y_{20} = -323$$

$$Y_{21} = 8,848$$

$$Y_{23} = 773$$

$$Y_{24} = (35)$$

$$Y_6 = Y_4$$

Fin \downarrow

$$Y_4 = 5047$$

$$Y_7 = 4,012$$

$$Y_9 = 150,329$$

$$Y_{12} = 6,116$$

$$Y_{13} = 5,082$$

$$Y_{14} = 105,766$$

$$Y_{15} = (1,028)$$

$$Y_{18} = 26,434$$

$$Y_{22} = 134,018$$

$$Y_3 = Y_5 = Y_{10} = Y_{19} = Y_{25} = \emptyset$$

$$Y^P = \begin{bmatrix} 151,157 \\ -1,813 \\ 0 \\ 5,047 \\ 0 \\ -394 \\ 4,012 \\ 100,325 \\ 150,329 \\ 0 \\ -37 \\ 6,116 \\ 5,082 \\ 105,766 \\ (1) \\ (1,028) \\ 222 \\ 26,434 \\ 0 \\ -323 \\ 8,848 \\ 134,018 \\ 773 \\ (35) \\ 0 \\ 74 \end{bmatrix}$$

$$A_y^P = X$$

✓

$$Y^{\text{Row}} = Y^P - Y^{\text{Null}}$$

$$Y^{\text{Null}} = N^T (N N^T)^{-1} N Y^P$$

$$Y^{\text{Row}} = Y^P - N^T (N N^T)^{-1} N Y^P$$

$$Y^{\text{Null}}_{26 \times 1} = \begin{bmatrix} 0 \\ 908.45 \\ 64,955.47 \\ 1,417.09 \\ -24,131.13 \\ 64,955.47 \\ 508.64 \\ 0 \\ 64,955.47 \\ 908.45 \\ -35,267.67 \\ -508.64 \\ 0 \\ 35,267.67 \\ 0 \\ -24,131.13 \\ 0 \\ 24,131.13 \\ -508.64 \\ 0 \\ 0 \\ 89086.60 \\ 0 \\ 0 \\ -35,267.67 \\ 0 \end{bmatrix}$$

A $y^{\text{Null}} = \emptyset$

y^{Row} -
 26×1

151,157	y_1
-2721.45	y_2
-64,955.47	y_3
3,629.41	y_4
24,131.133	y_5
-65,349.47	y_6
3,503.36	y_7
100,325	y_8
85,373.533	y_9
-408.45	y_{10}
35,230.67	y_{11}
6,624.64	y_{12}
5,082	y_{13}
70,498.33	y_{14}
-1	y_{15}
23,103.13	y_{16}
222	y_{17}
2,302.87	y_{18}
508.64	y_{19}
-323	y_{20}
8,848	y_{21}
44,931.46	y_{22}
773	y_{23}
-35	y_{24}
35,267.67	y_{25}
74	y_{26}

$A_y^{\text{Row}} = X$

$N_y^{\text{Row}} = 0$

$A_0 y - x_0$

$$\begin{bmatrix} y \\ x_0 \\ r_x \end{bmatrix} \sim N\left(\begin{bmatrix} M \\ A_0 M \end{bmatrix}, \begin{bmatrix} \Sigma_{yy} & \Sigma_{yx} \\ \Sigma_{xy} & \Sigma_{xx} \end{bmatrix}\right)$$

$\Sigma_{yx} = \Sigma A_0^T$
 $\Sigma_{xx} = A_0 \Sigma A_0^T$
 $\Sigma_{yy} = \Sigma_{xx}$

$$(y|x_0) \sim N(E[y|x_0], \text{var}[y|x_0])$$

$$E[y|x_0] = M + \Sigma A_0^T [A_0 \Sigma A_0^T]^{-1} A_0 (y^* - M)$$

$$\text{VAR}[y|x_0] = \Sigma - \Sigma A_0^T (A_0 \Sigma A_0^T)^{-1} A_0 \Sigma$$

Background

$$E[y|B] = M = \begin{bmatrix} 12377 \\ 1554 \\ 10535 \\ 0 \\ 47 \\ 62 \\ 1125 \\ 2517 \\ 0 \\ 4680 \\ 0 \\ (72) \\ 1 \\ 0 \\ 7 \\ 5 \\ 6120 \\ 437 \\ 0 \\ 7500 \\ 150 \\ 667 \\ 17 \\ 0 \\ 16 \\ (734) \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \\ y_4 \\ y_5 \\ y_6 \\ y_7 \\ y_8 \\ y_9 \\ y_{10} \\ y_{11} \\ y_{12} \\ y_{13} \\ y_{14} \\ y_{15} \\ y_{16} \\ y_{17} \\ y_{18} \\ y_{19} \\ y_{20} \\ y_{21} \\ y_{22} \\ y_{23} \\ y_{24} \\ y_{25} \\ y_{26} \end{bmatrix}$$

$$y^P = \begin{bmatrix} 151, 157 \\ -1813 \\ 0 \\ 5,047 \\ 0 \\ -394 \\ 4012 \\ 100,325 \\ 150,329 \\ 0 \\ -37 \\ 6116 \\ 5082 \\ 105,766 \\ (1) \\ (1,028) \\ 222 \\ 26,434 \\ 0 \\ -323 \\ 8848 \\ (34,018) \\ 773 \\ (35) \\ 0 \\ 74 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \\ y_3 \\ y_4 \\ y_5 \\ y_6 \\ y_7 \\ y_8 \\ y_9 \\ y_{10} \\ y_{11} \\ y_{12} \\ y_{13} \\ y_{14} \\ y_{15} \\ y_{16} \\ y_{17} \\ y_{18} \\ y_{19} \\ y_{20} \\ y_{21} \\ y_{22} \\ y_{23} \\ y_{24} \\ y_{25} \\ y_{26} \end{bmatrix}$$

$$\text{Var}[y|B] = \varepsilon = (3,498.609)^2 I_{26} - (1,246,266) I_{26}$$

$\underbrace{\quad\quad\quad}_{\text{SSE of } y^p \text{ and } u}$

$$E[y|x_0] = \begin{bmatrix} 139,152 \\ -4,168,043 \\ -11712 \\ 13,888 \\ 7325 \\ -1864 \\ -10651 \\ 81,714,475 \\ 4957 \\ -34,85,907 \\ -12,184 \\ 8,085,198 \\ -1932 \\ 6,442,525 \\ -12,164 \\ 6,765 \\ -595 \\ -4,740,2 \\ -6,045,148 \\ -5,259 \\ -4,740,2 \\ -6,045,198 \\ -5,259 \\ 7,198 \\ 19,883 \\ 543 \\ 7,013 \\ 18,647,525 \\ 7,122 \end{bmatrix}$$

$$\text{Var}[y|x_0] =$$

26x26