

# The general theory of labour value

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PhD Thesis supervised by Dr Andrew Trigg, Open University

Accompanying paper:

[ianwrightsite.files.wordpress.com/2017/04/general-theory-labour-value2.pdf](http://ianwrightsite.files.wordpress.com/2017/04/general-theory-labour-value2.pdf)

# Contents of paper

- Part 1: Linear production model
  - Multiple measures of “labour value”
  - “Labour embodied” equals “labour commanded” even with “profits on stock”

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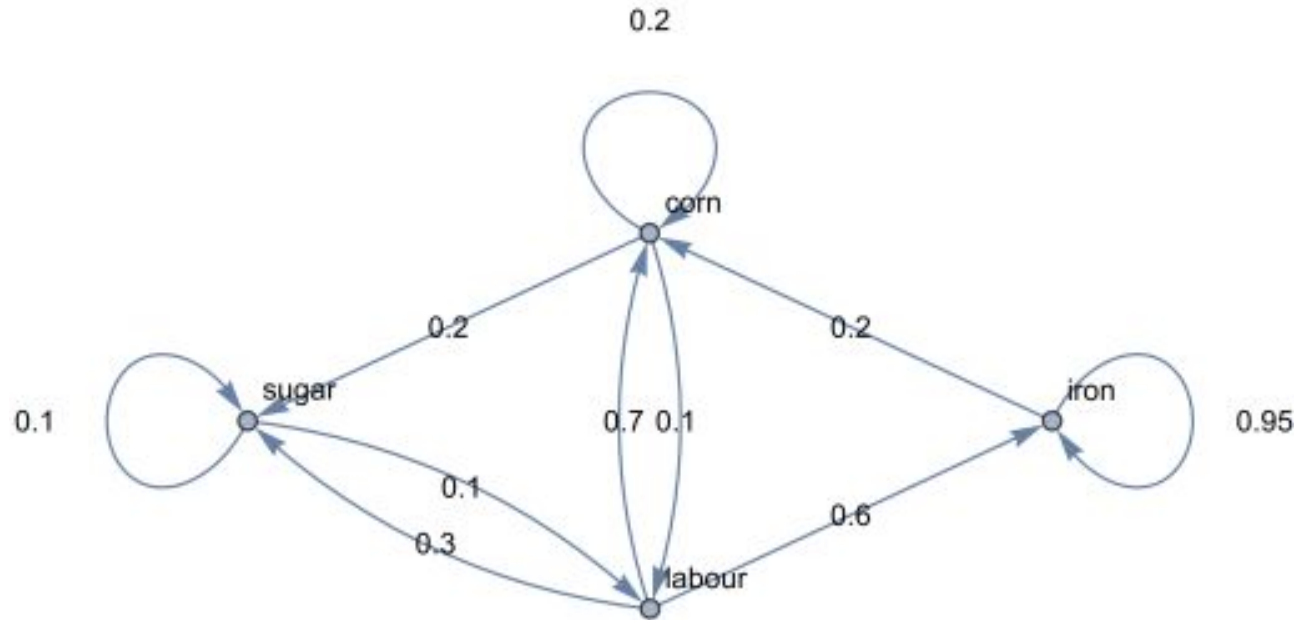
- Part 1: Linear production model
  - Multiple measures of “labour value”
  - “Labour embodied” equals “labour commanded” even with “profits on stock”
  
- Part 2: Nonlinear dynamic model
  - Minimal model of the dynamics of classical competition
  - A general law of value

# Plan of talk

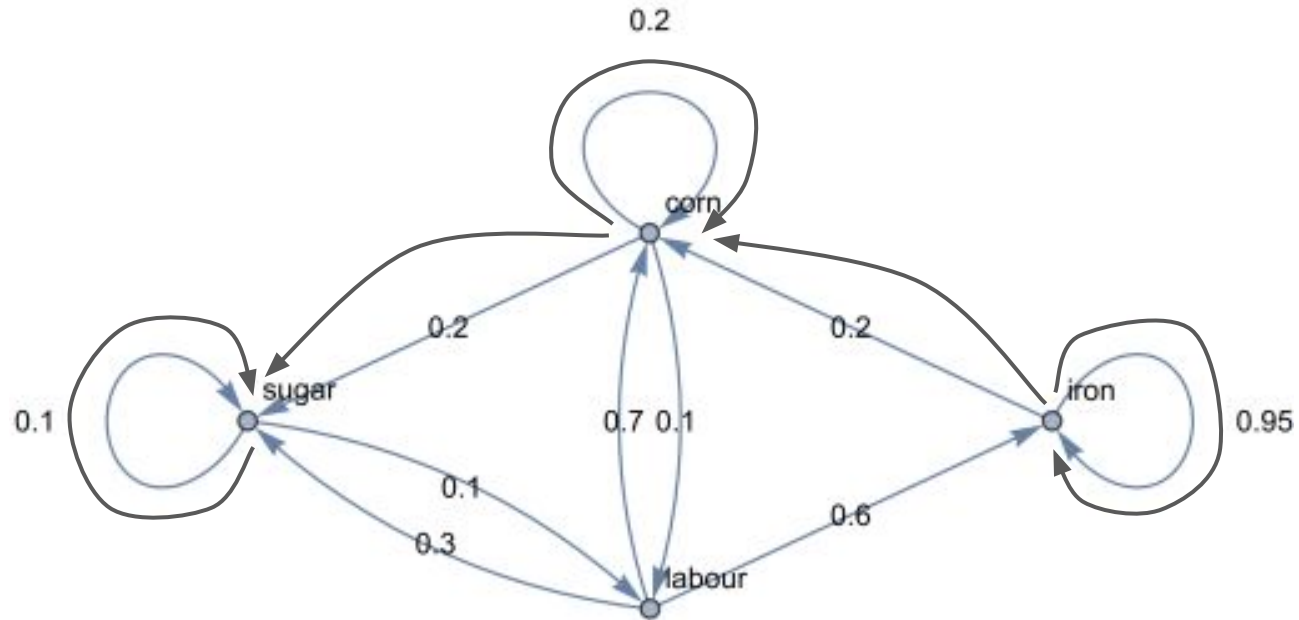
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# Part 1: Linear production model

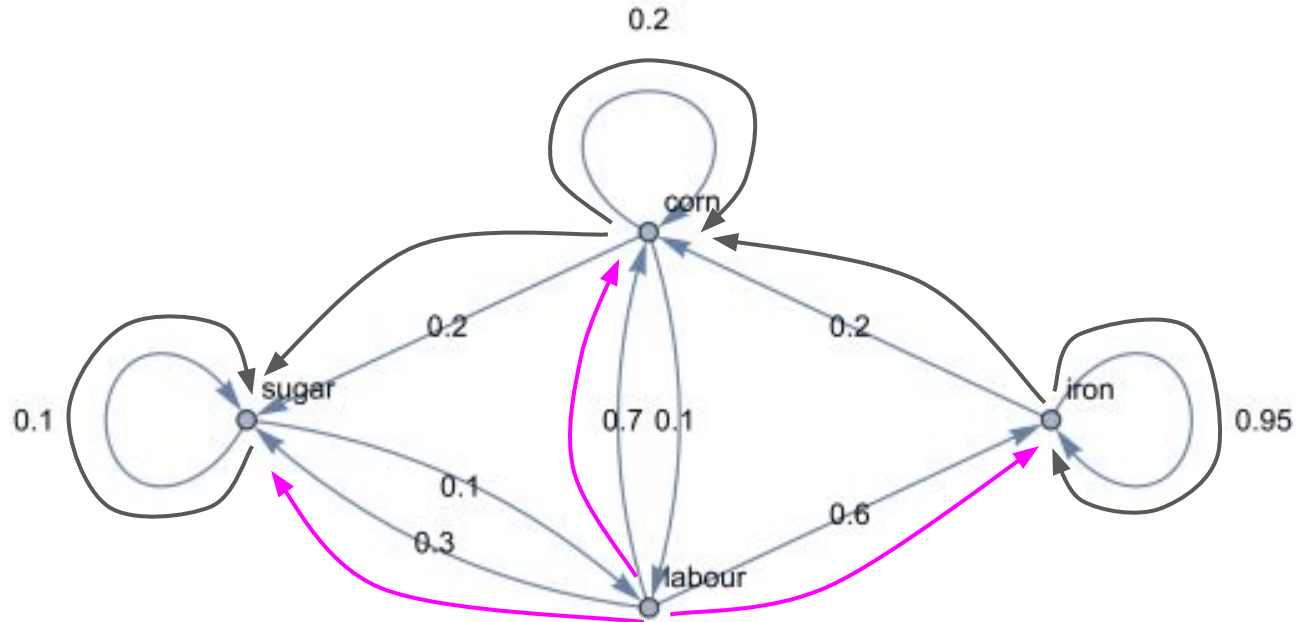
# A steady-state multi-sector economy



# Flows of goods

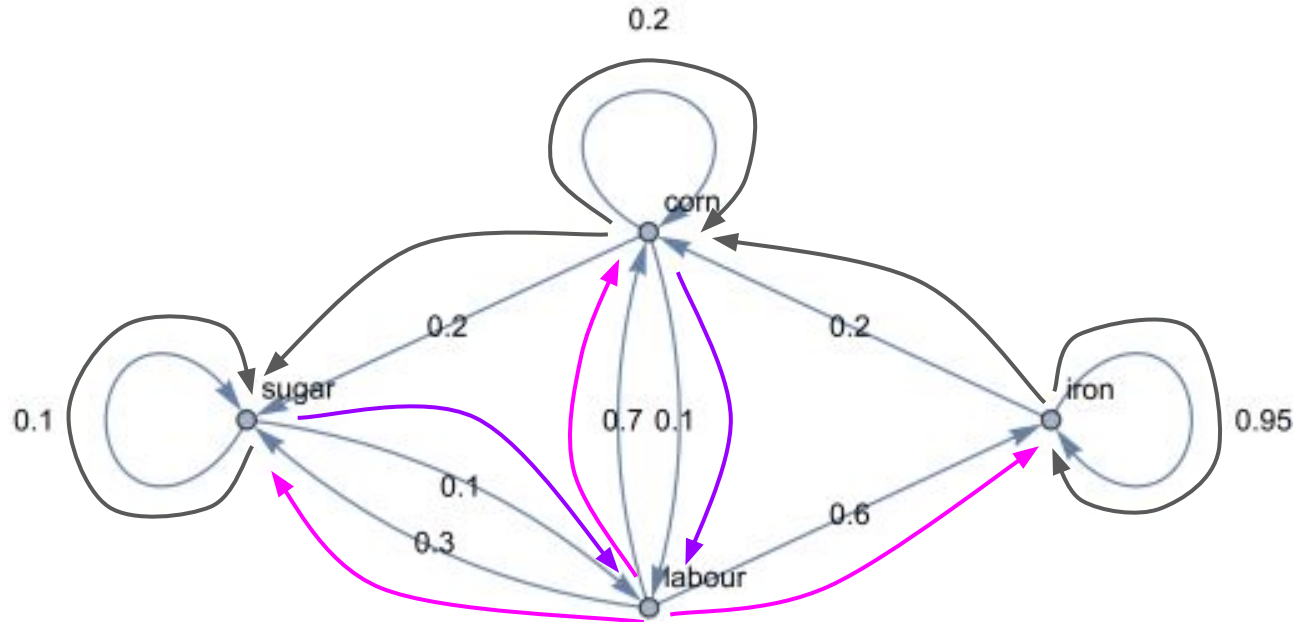


# Supply of labour

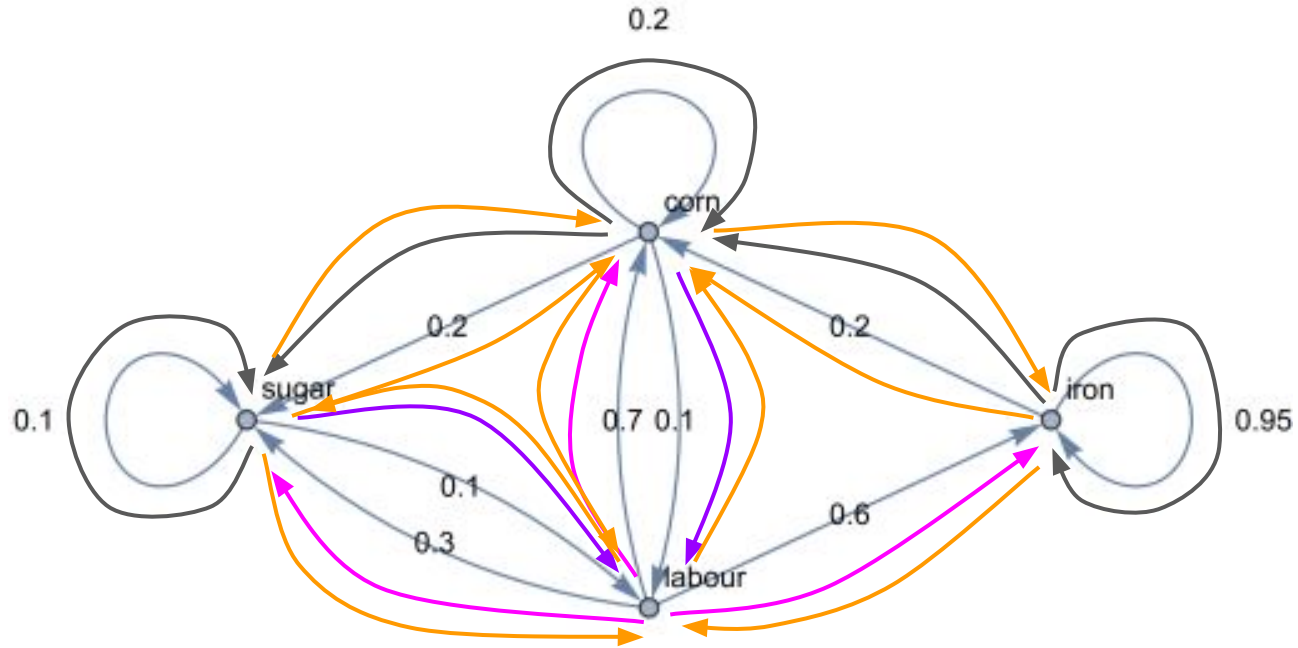




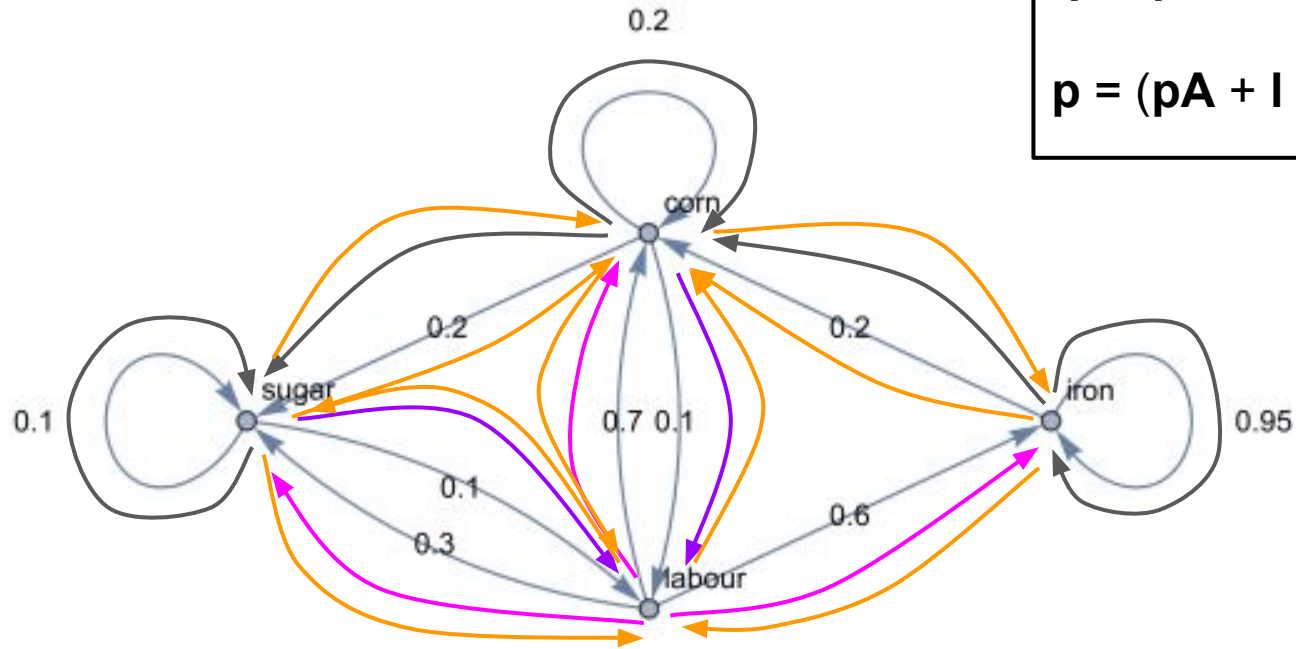
# Consumption of real wage



# Flows of payments



# Steady-state equilibrium



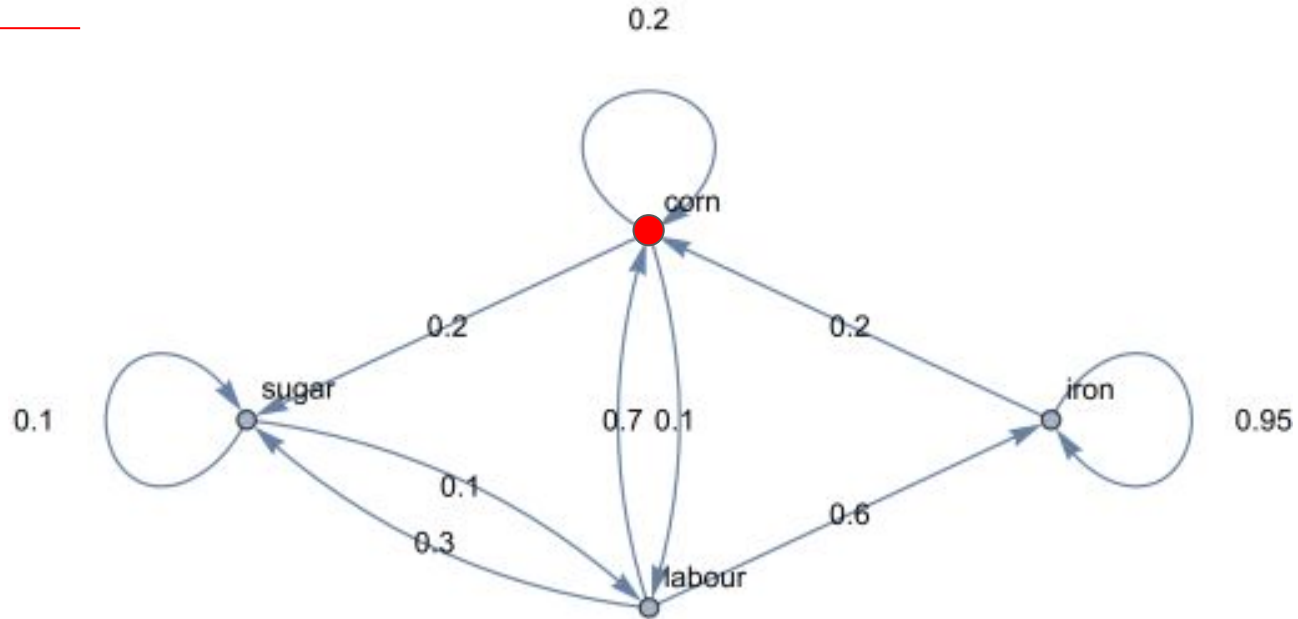
$$q = qA + w + c$$

$$p = (pA + I w)(1 + \pi)$$

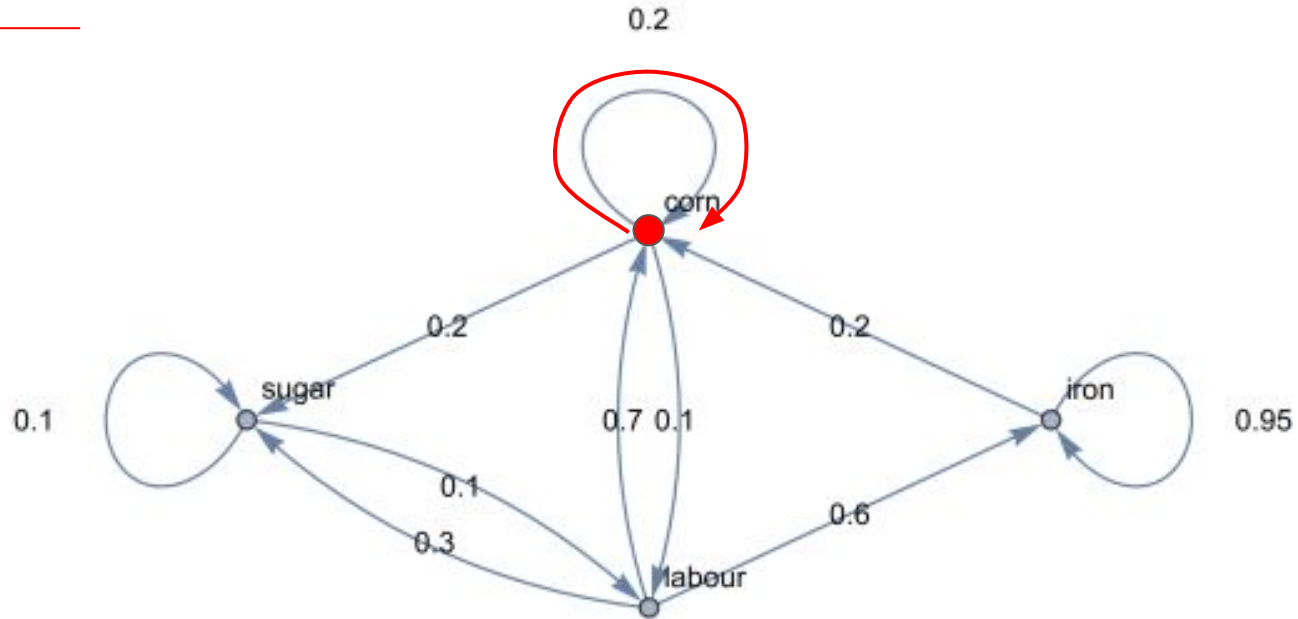
# Vertical integration

- How much coexisting labour is supplied to produce a commodity?

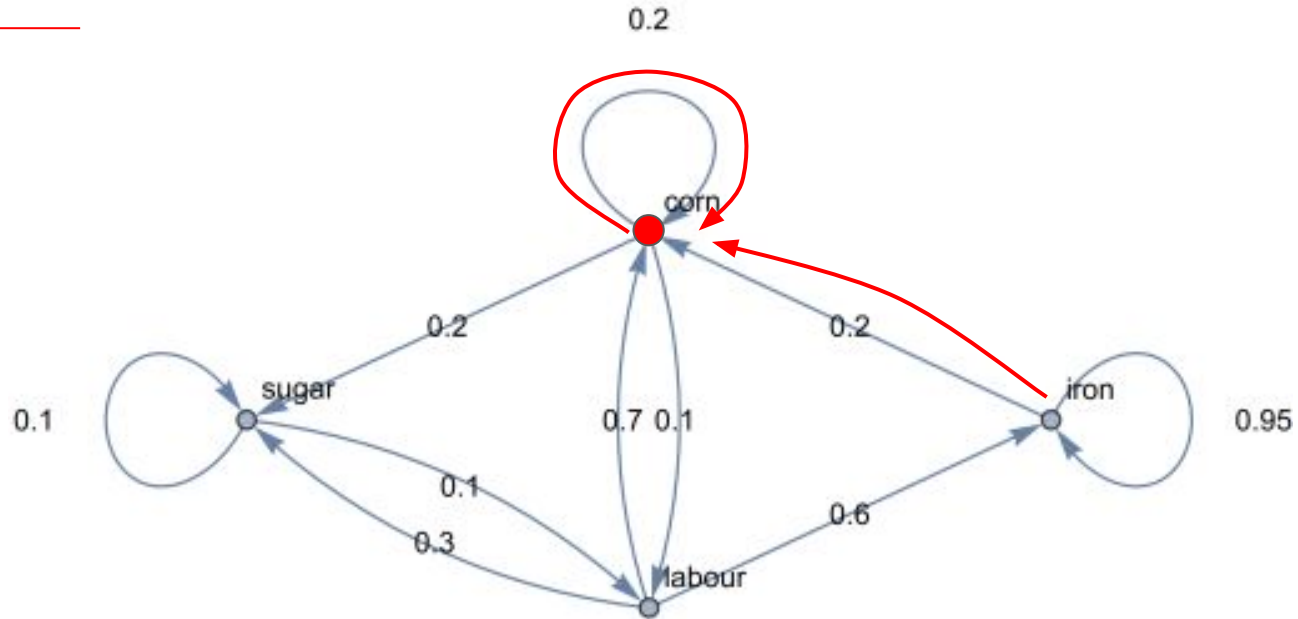
# Vertical integration iteration 1



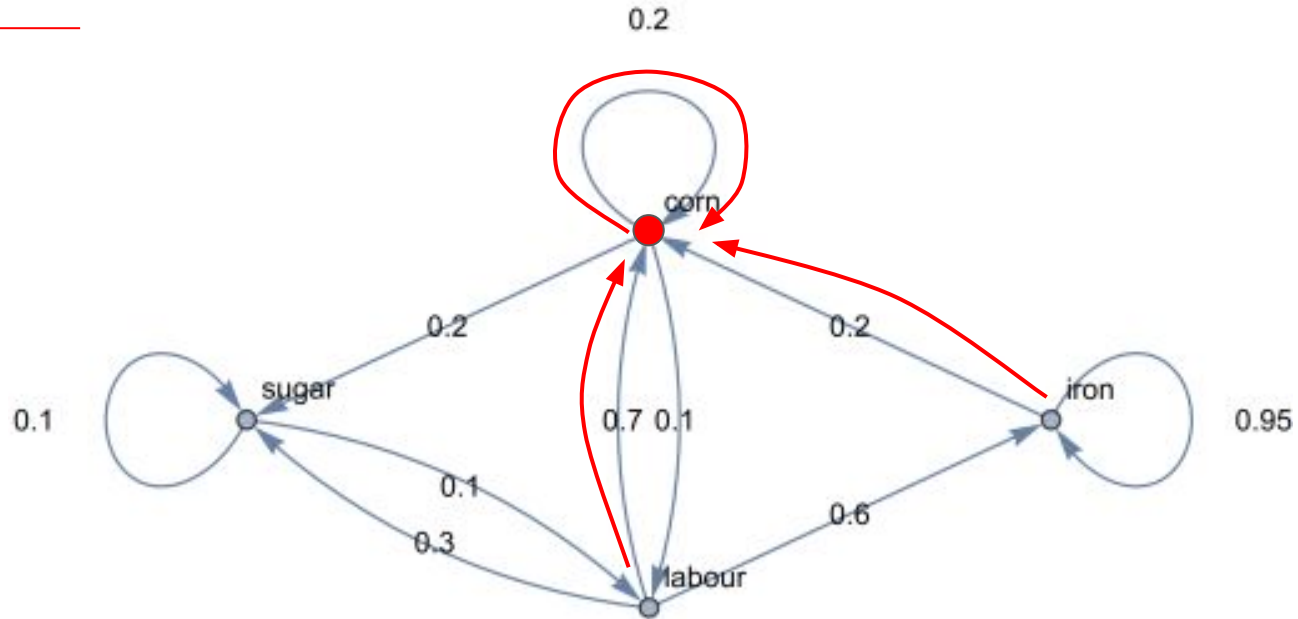
# Vertical integration iteration 1



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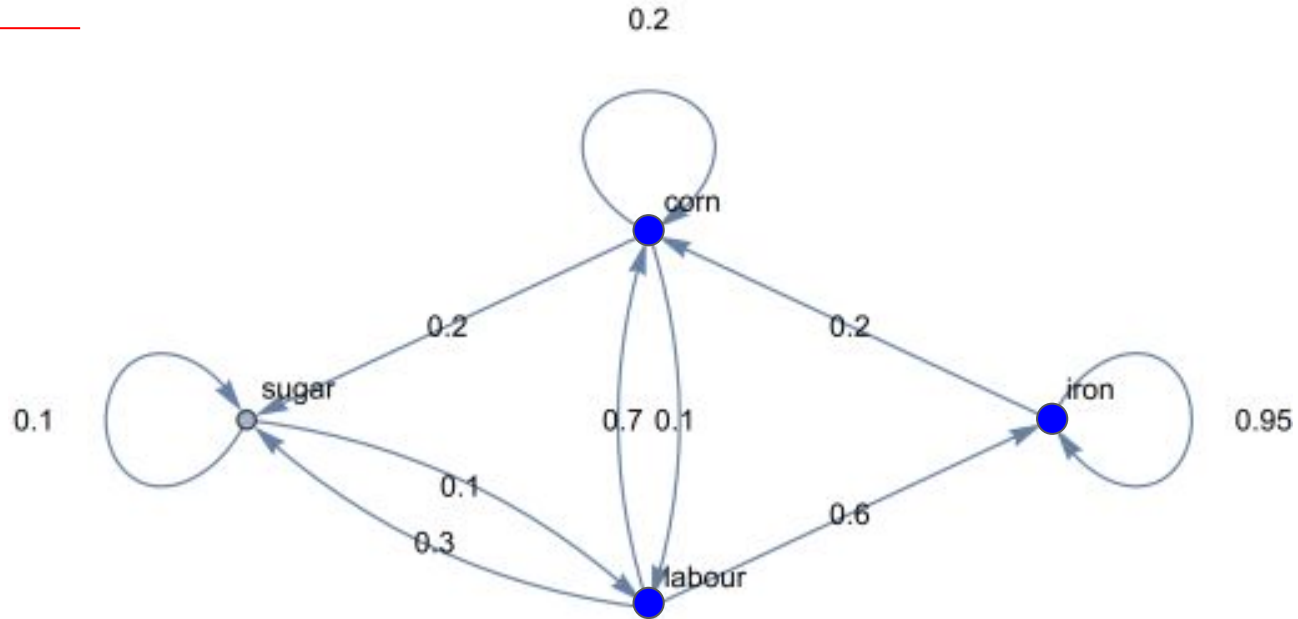


# Vertical integration **iteration 1**

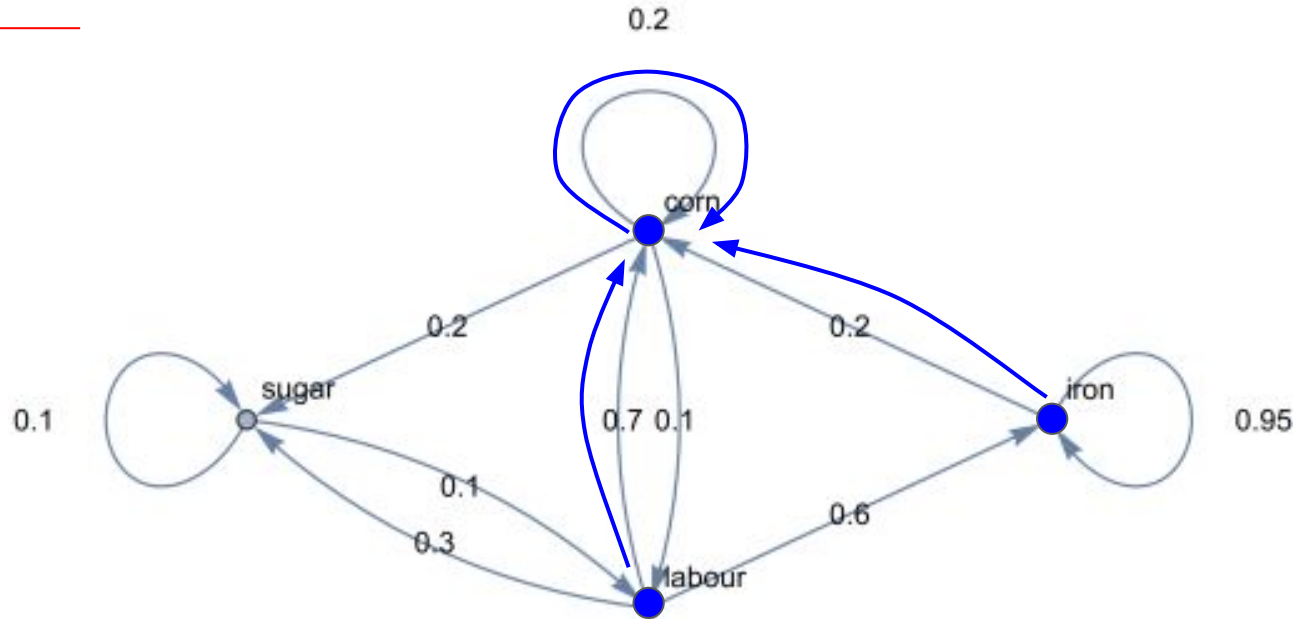




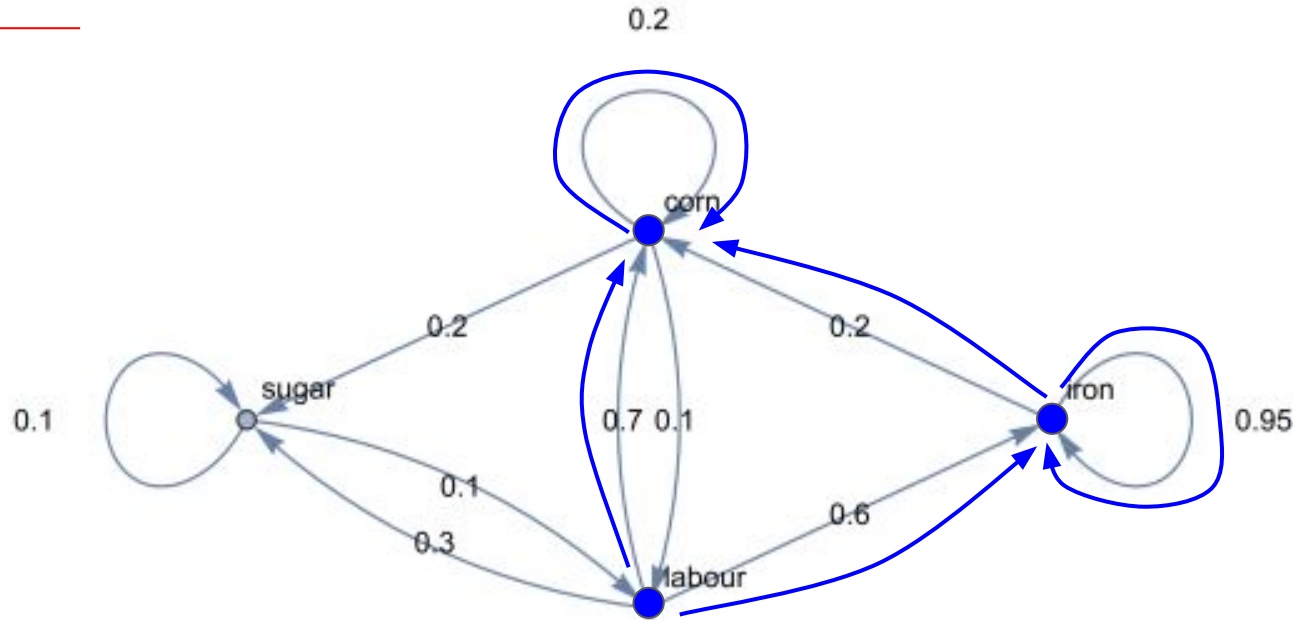
# Vertical integration iteration 2



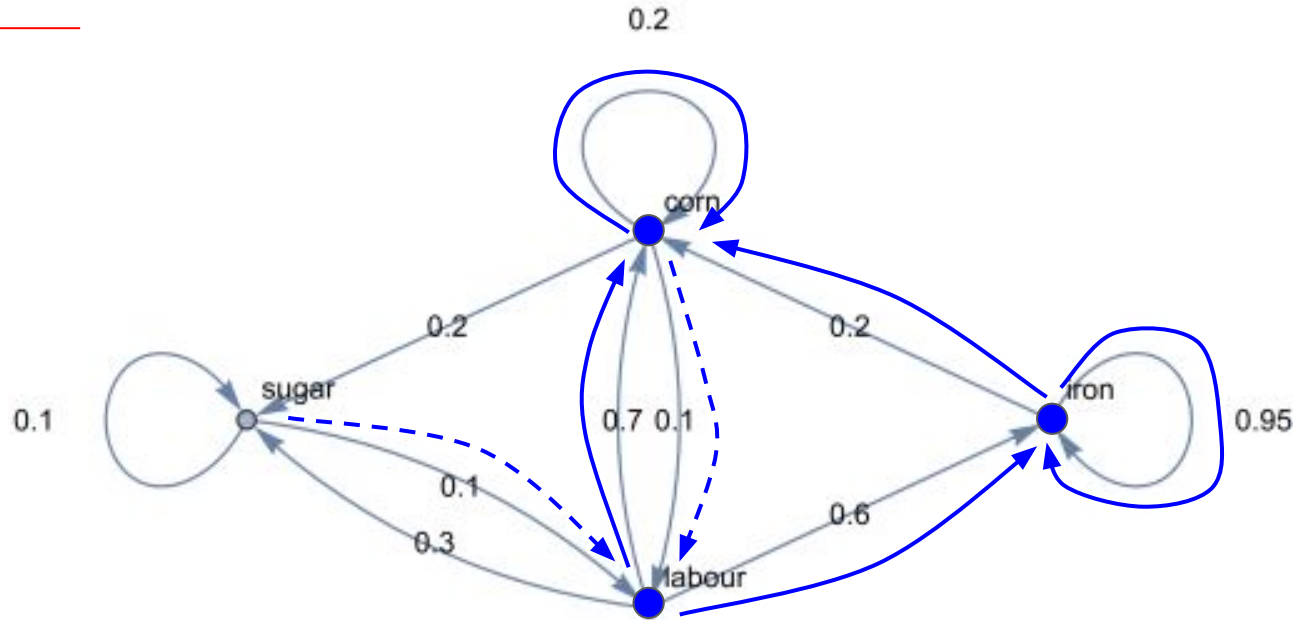
# Vertical integration iteration 2



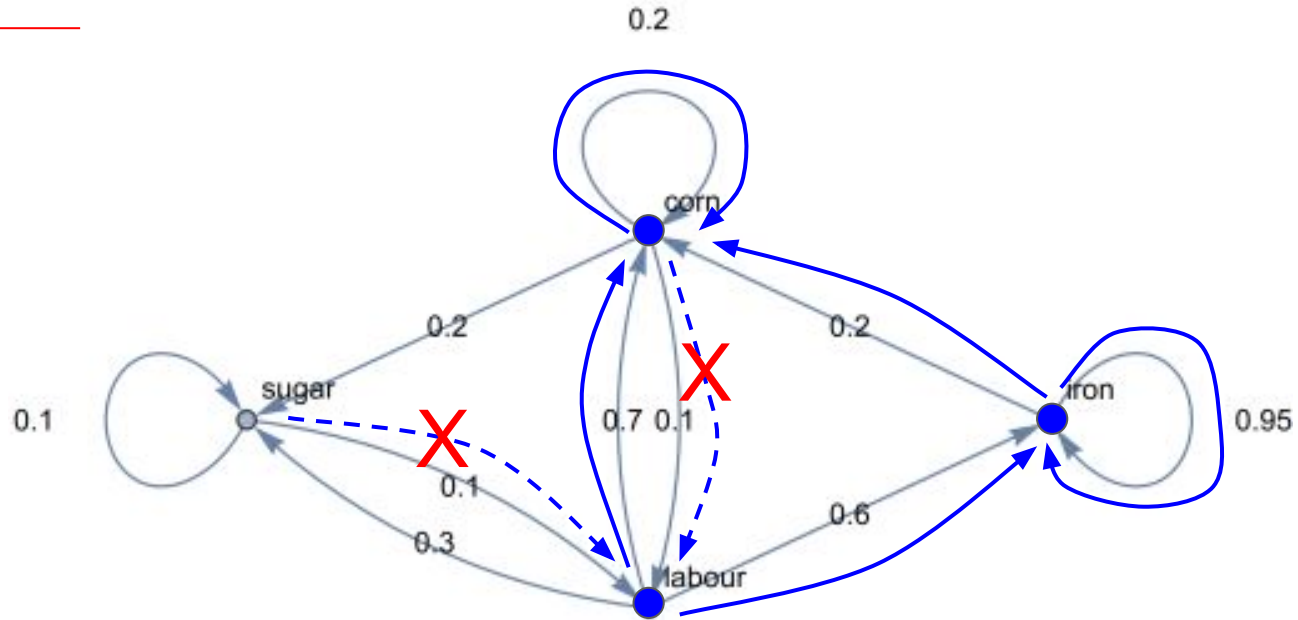
# Vertical integration iteration 2



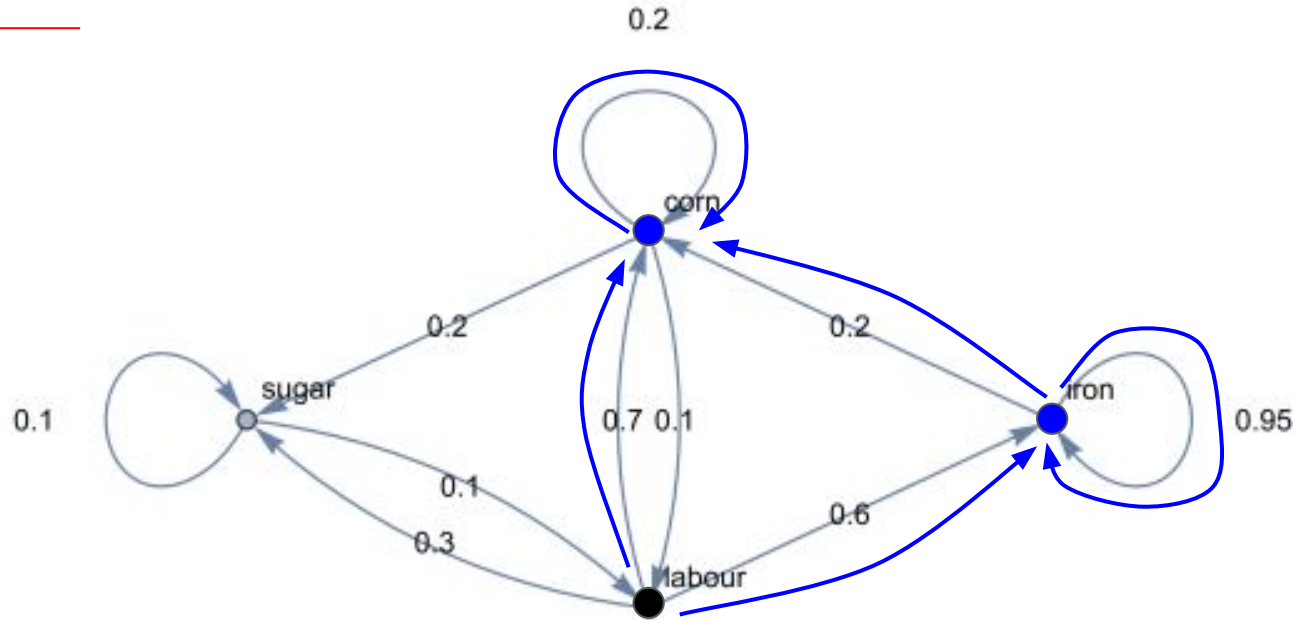
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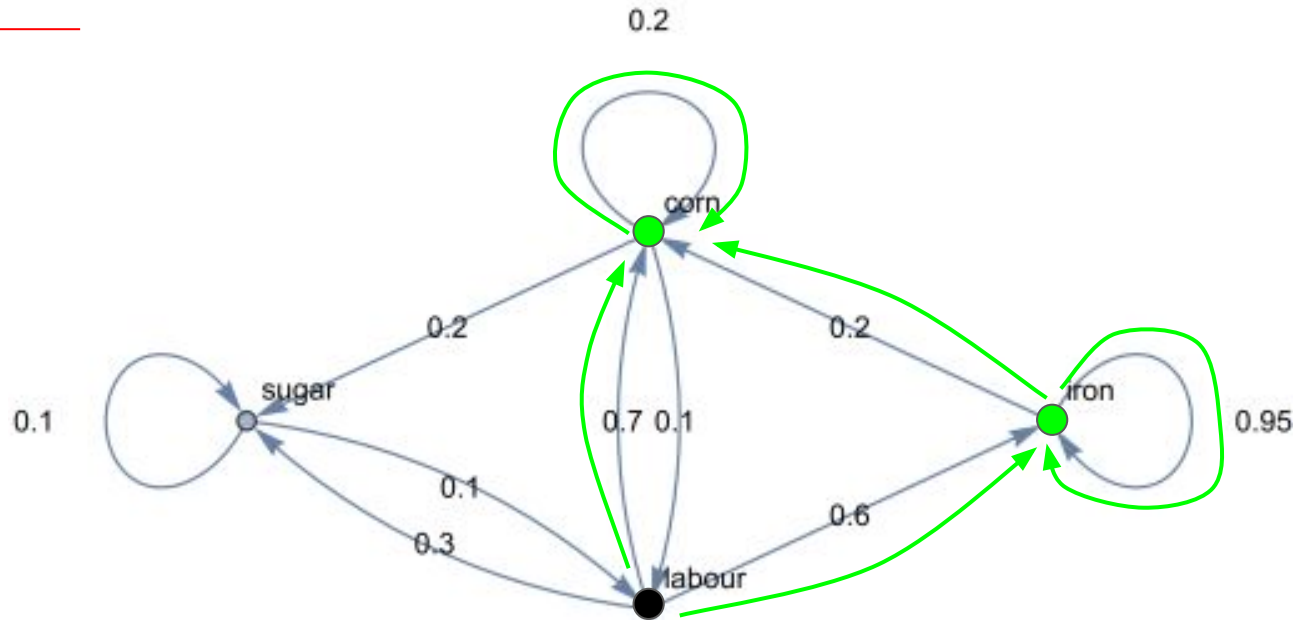
# We do not vertically integrate the real wage



# Labour costs are a terminus

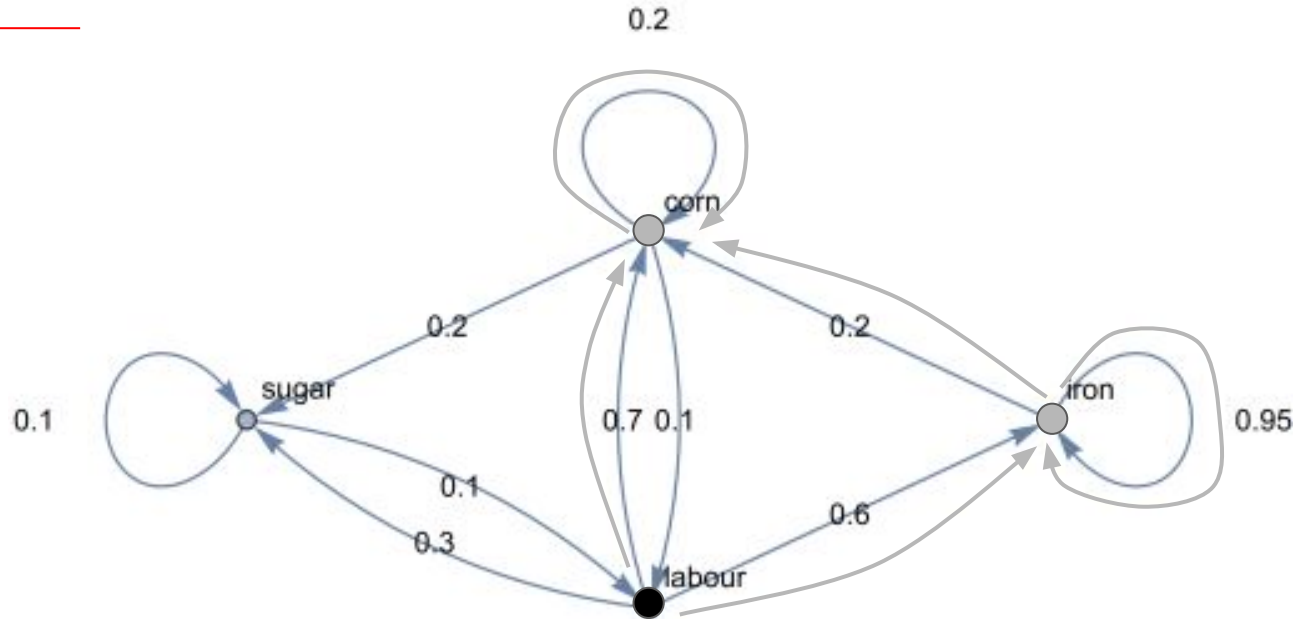


# Vertical integration iteration 3



# Vertical integration iteration $n \rightarrow \infty$

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# Classical labour values

$$\mathbf{v} = \mathbf{l} (\mathbf{I} + \mathbf{A} + \mathbf{A}^2 + \mathbf{A}^3 + \dots)$$

vertical integration

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$$= \mathbf{l} (\mathbf{I} - \mathbf{A})^{-1}$$

vertical integration

vertically integrated subsystem

# Classical labour values

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$$= \mathbf{l} (\mathbf{I} - \mathbf{A})^{-1}$$

$$= \mathbf{l} + \mathbf{vA}$$

vertical integration

vertically integrated subsystem

direct plus indirect labour

Marx: new labour added plus transfer of labour 'embodied' in means of production

# Vertical integration

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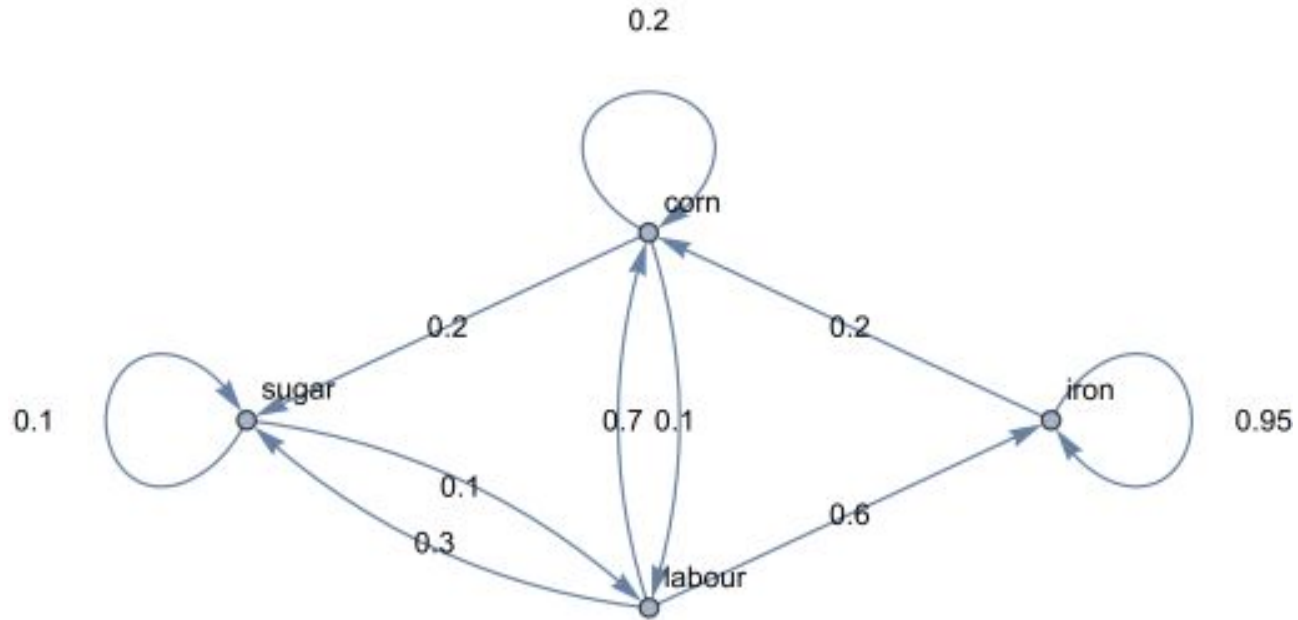
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- How much coexisting labour is supplied to produce a commodity?
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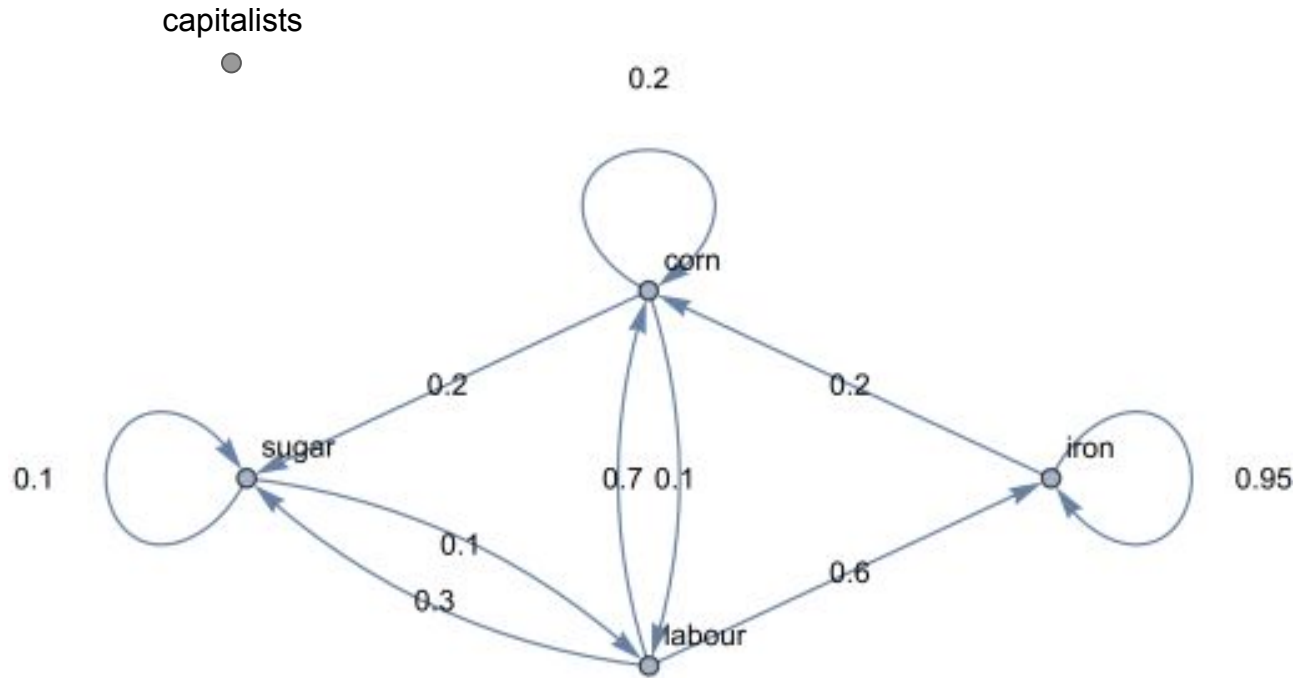
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- How much coexisting labour is supplied to produce a commodity?
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- But did we really count all the coexisting labour?

# A steady-state multi-sector economy

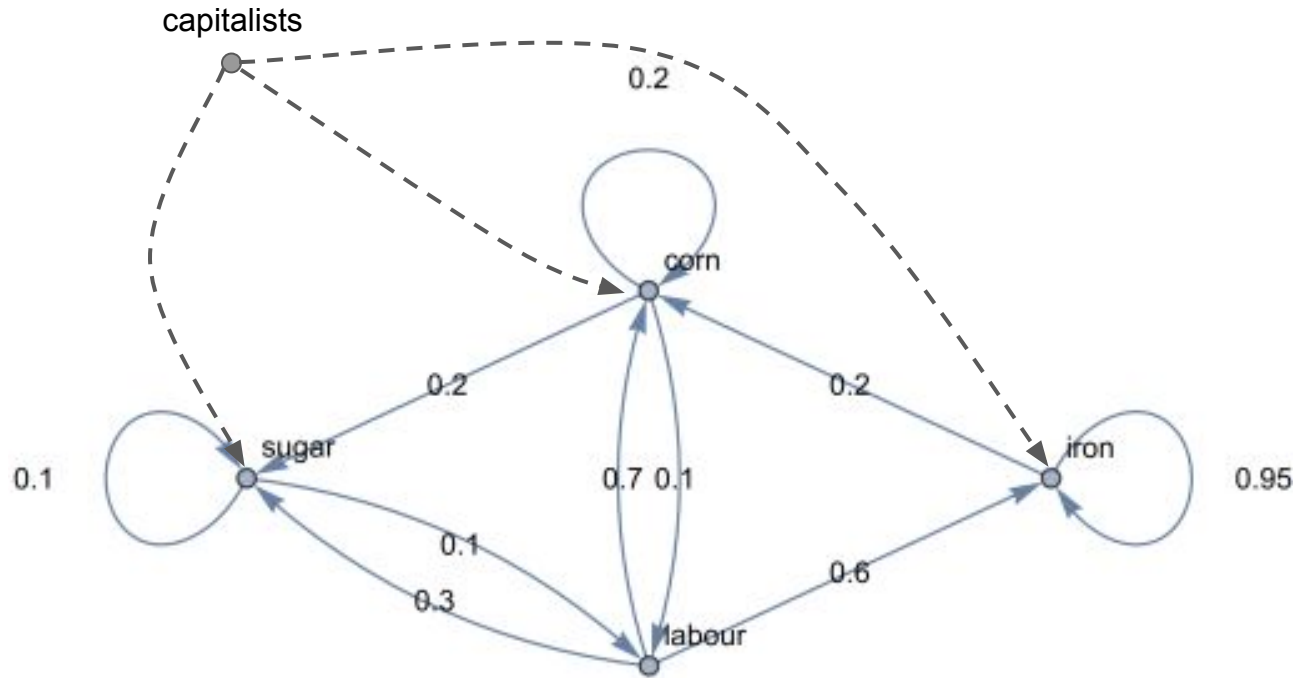


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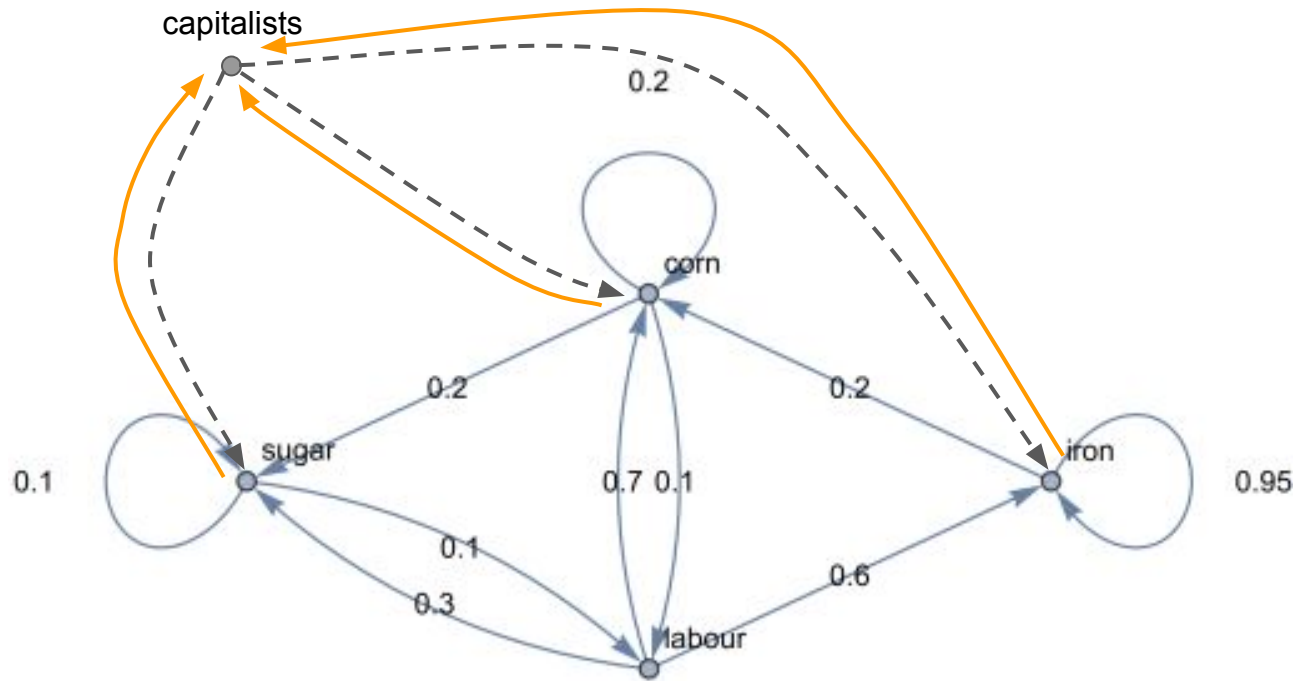




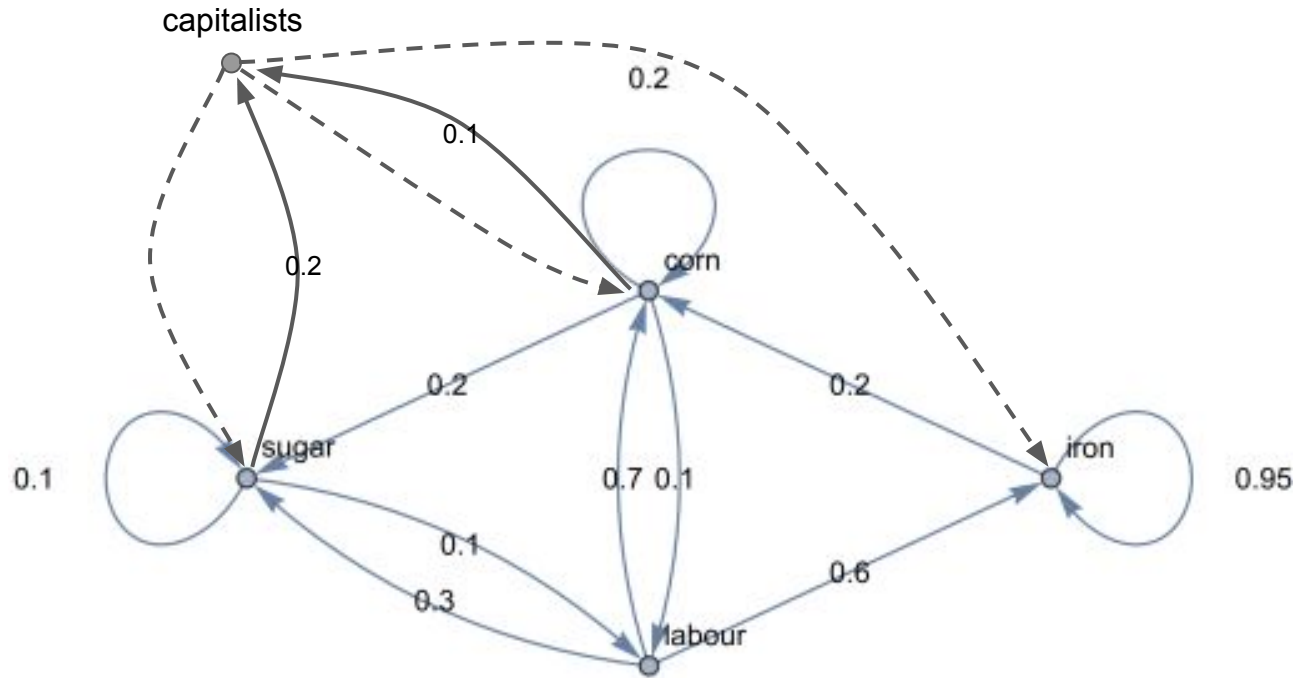
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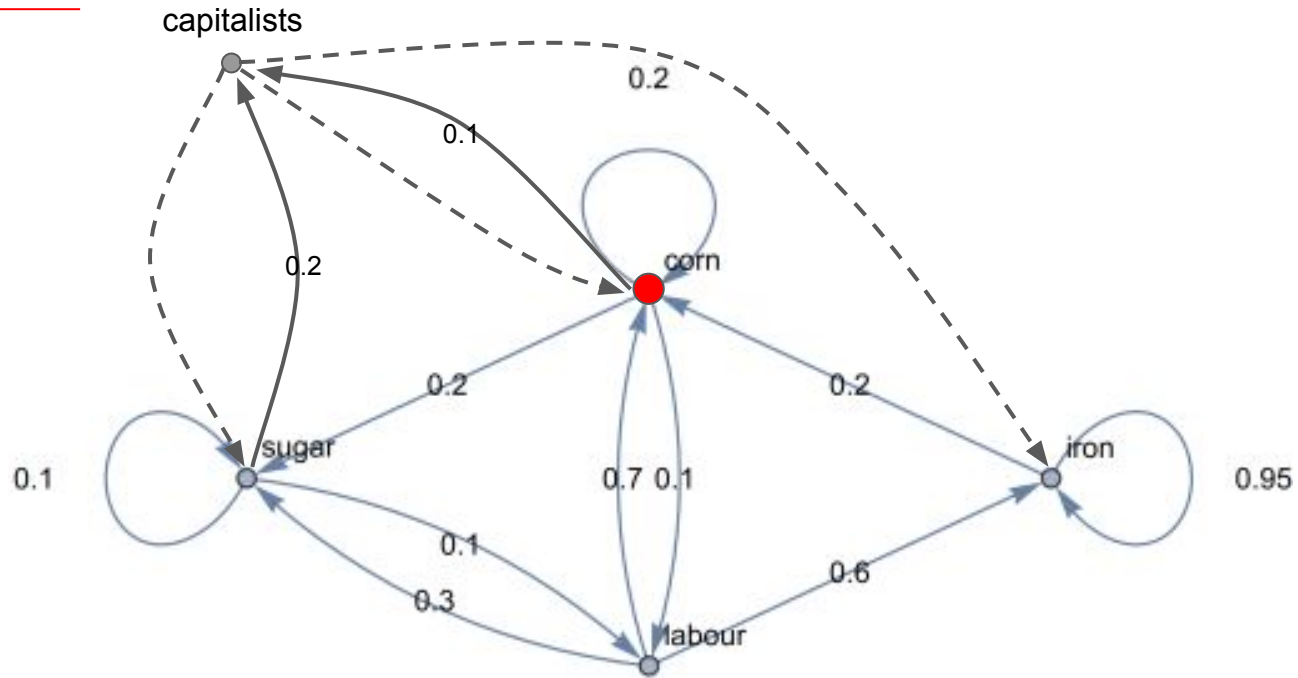
# Flow of profit income



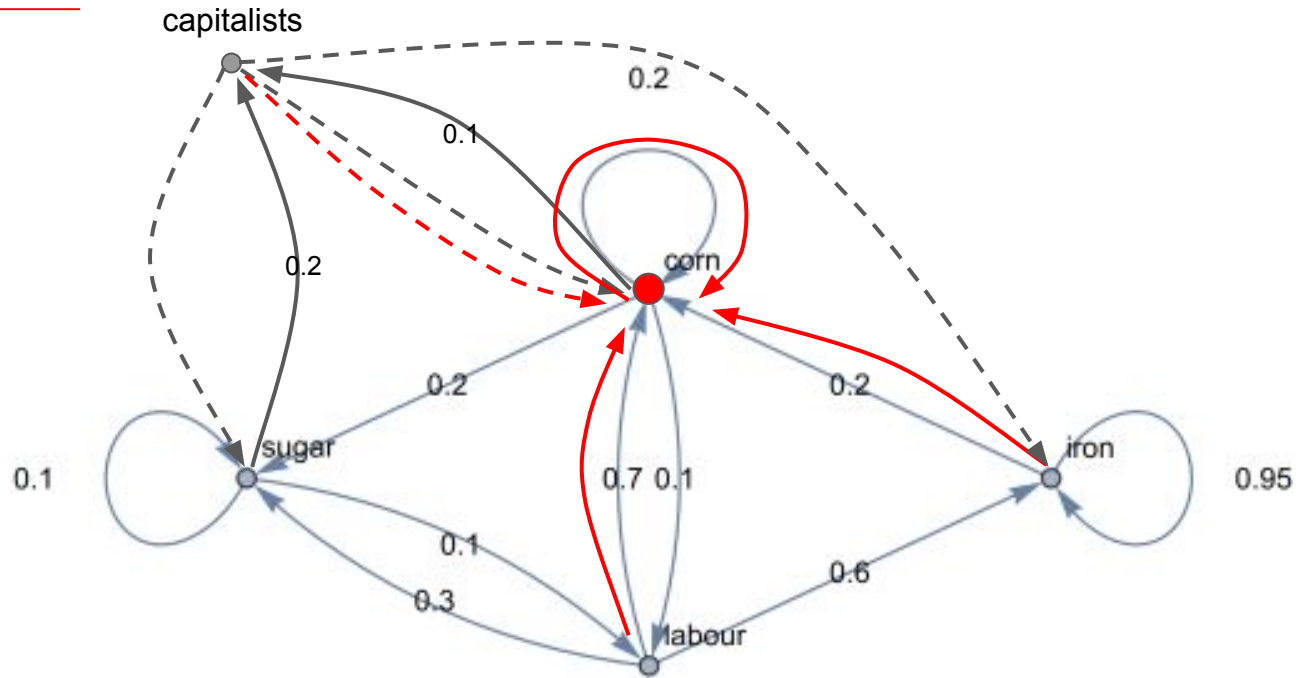
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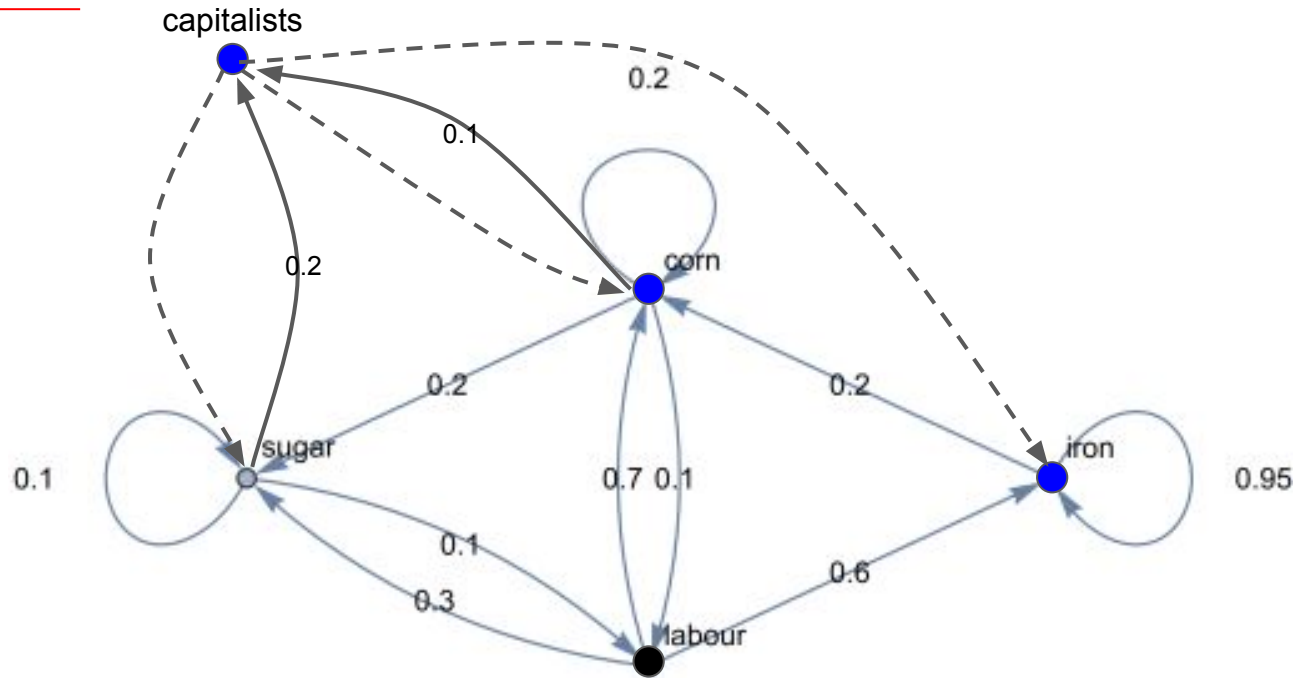
# Vertical integration **iteration 1**



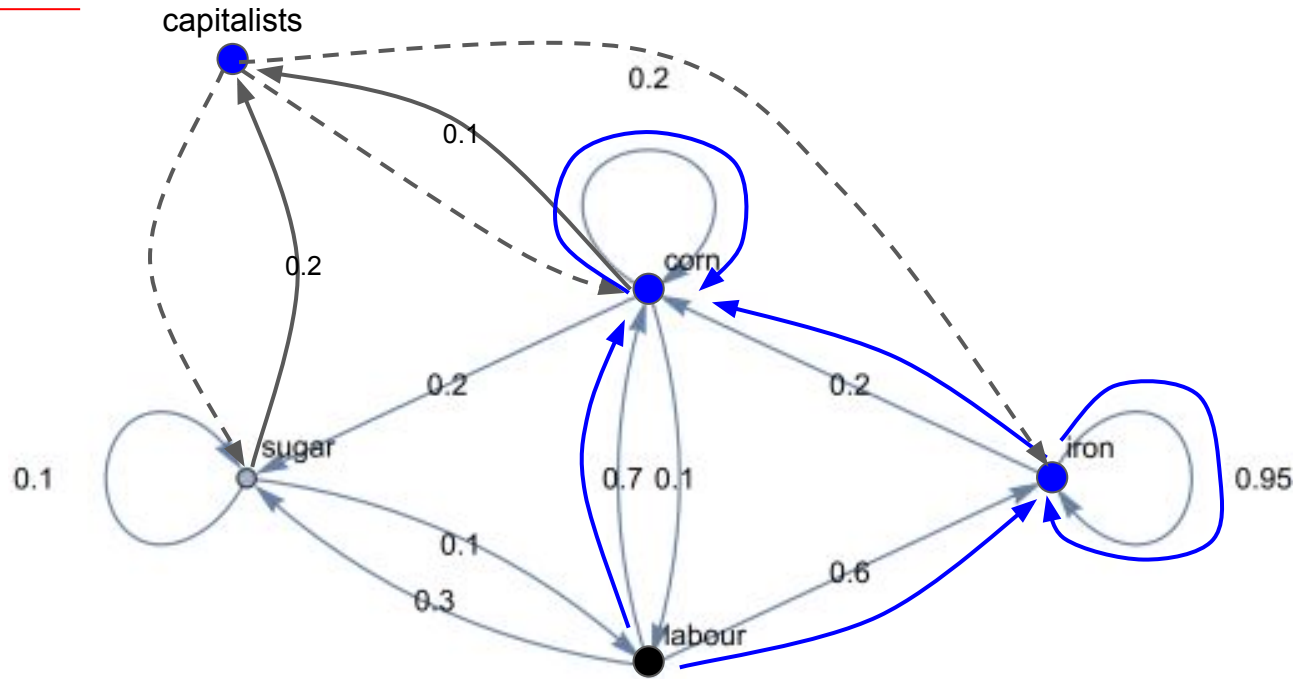
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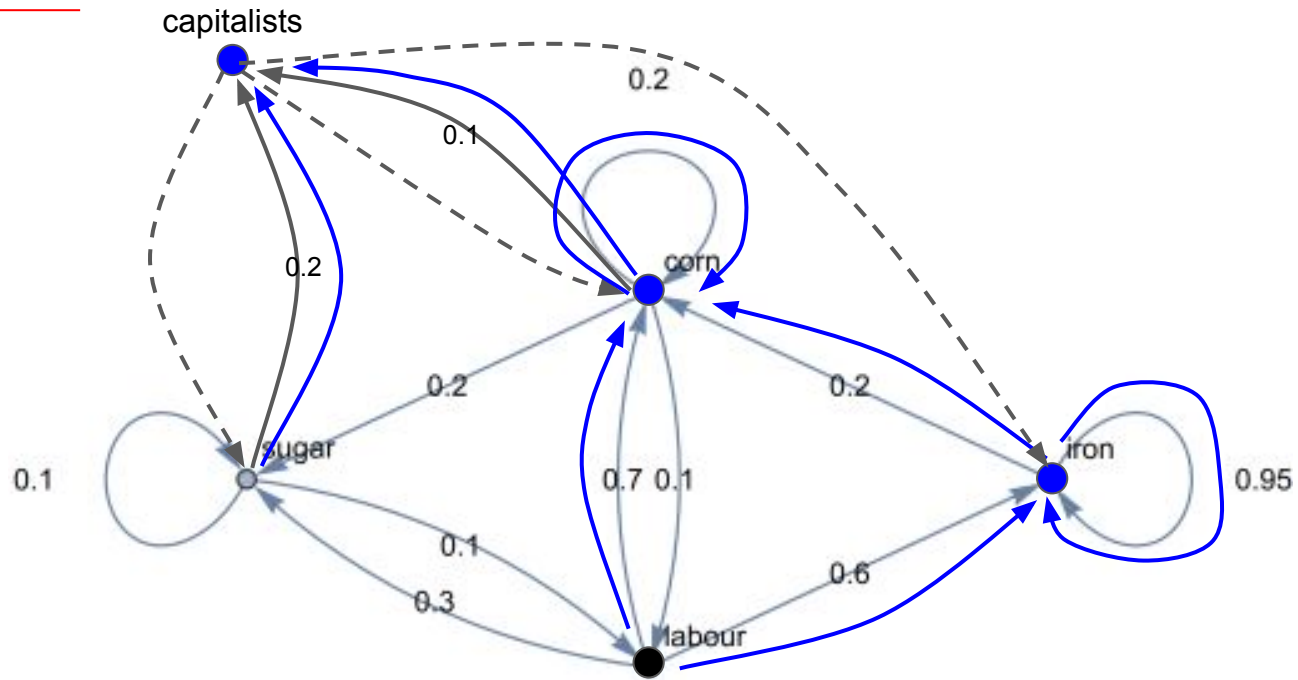
# Vertical integration iteration 2



# Vertical integration iteration 2

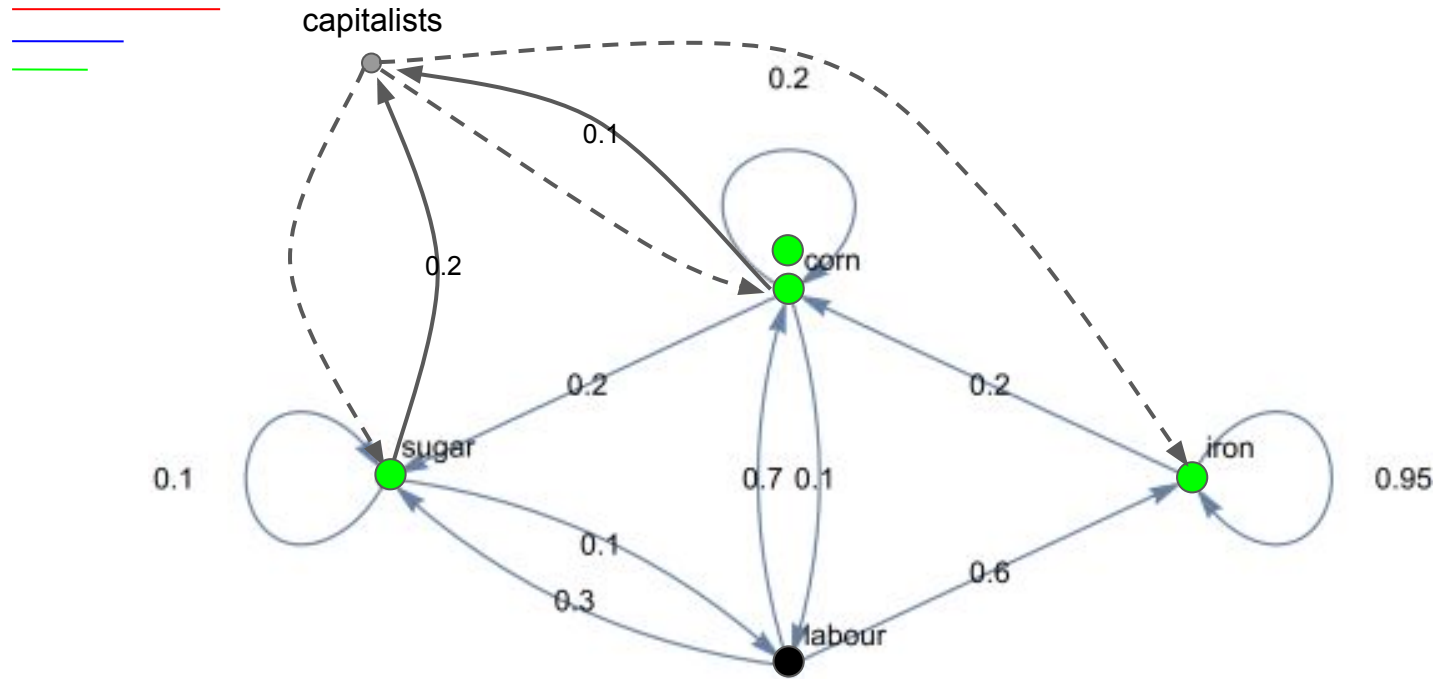


# Vertical integration iteration 2

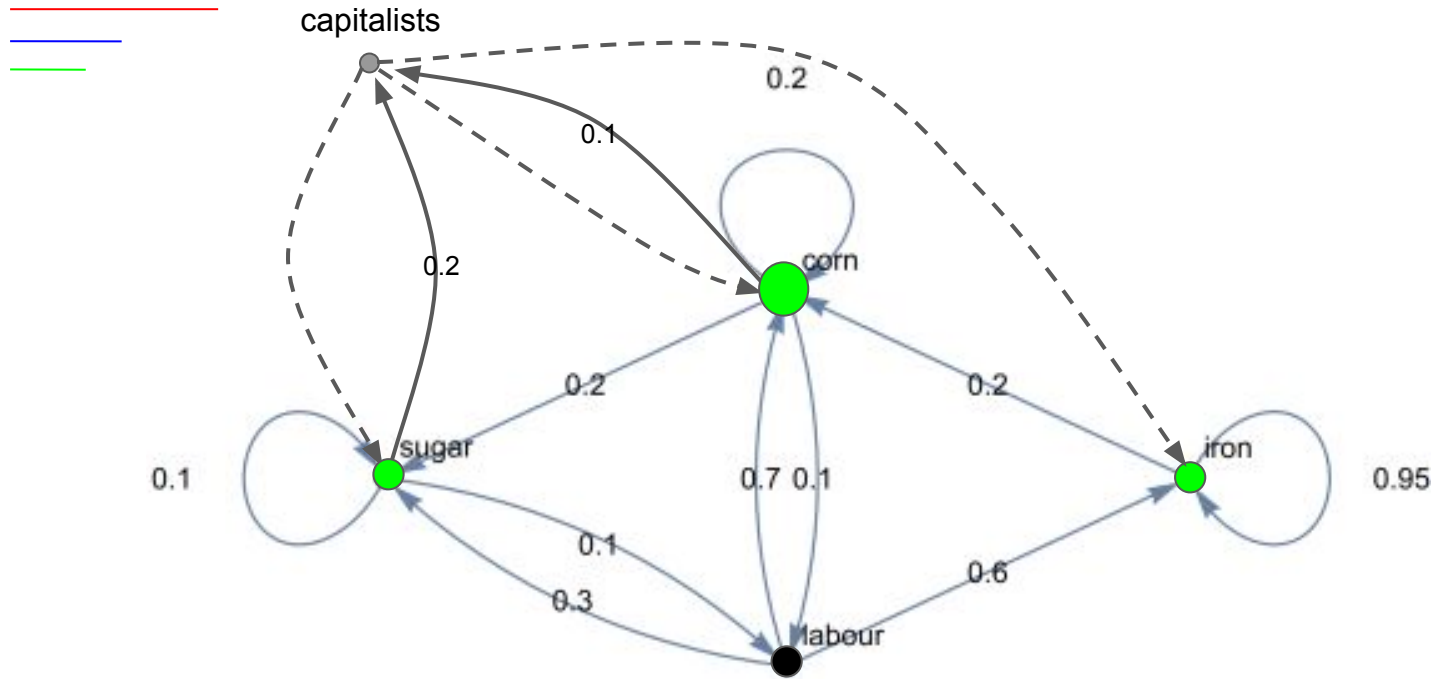




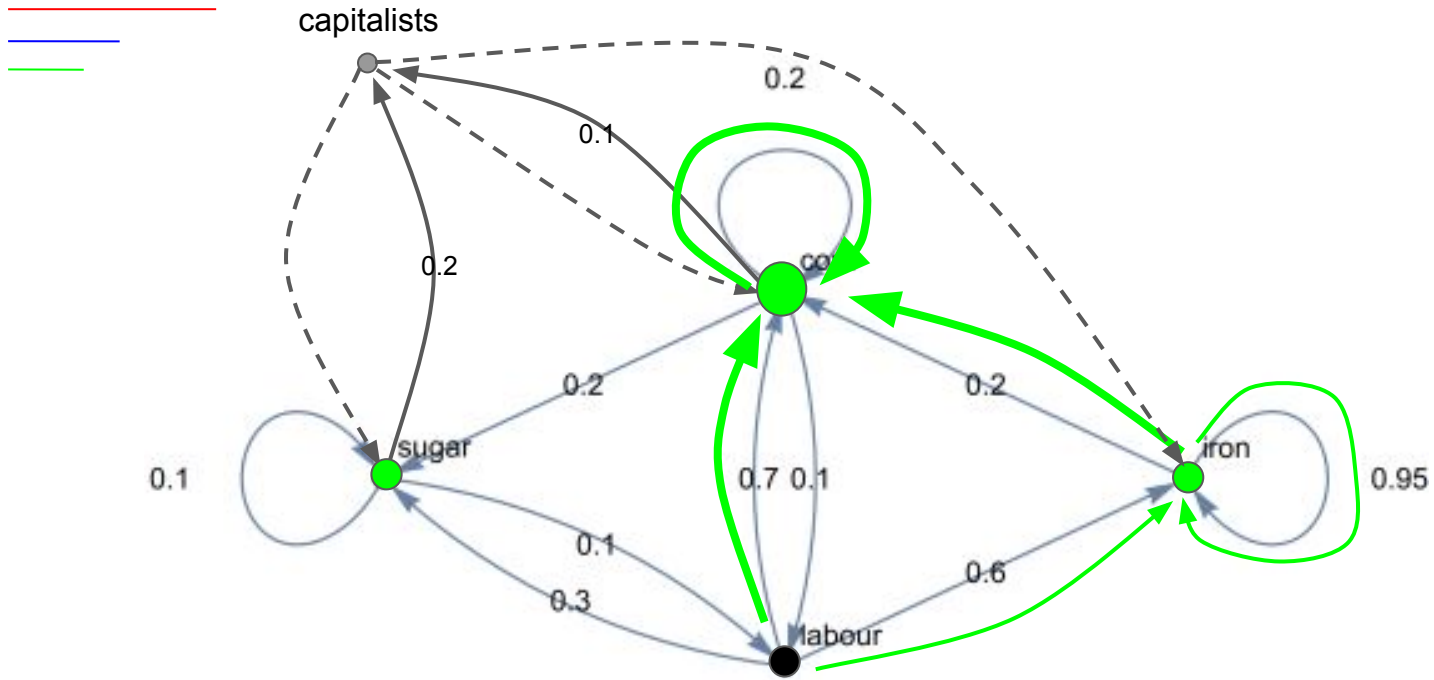
# Vertical integration iteration 3



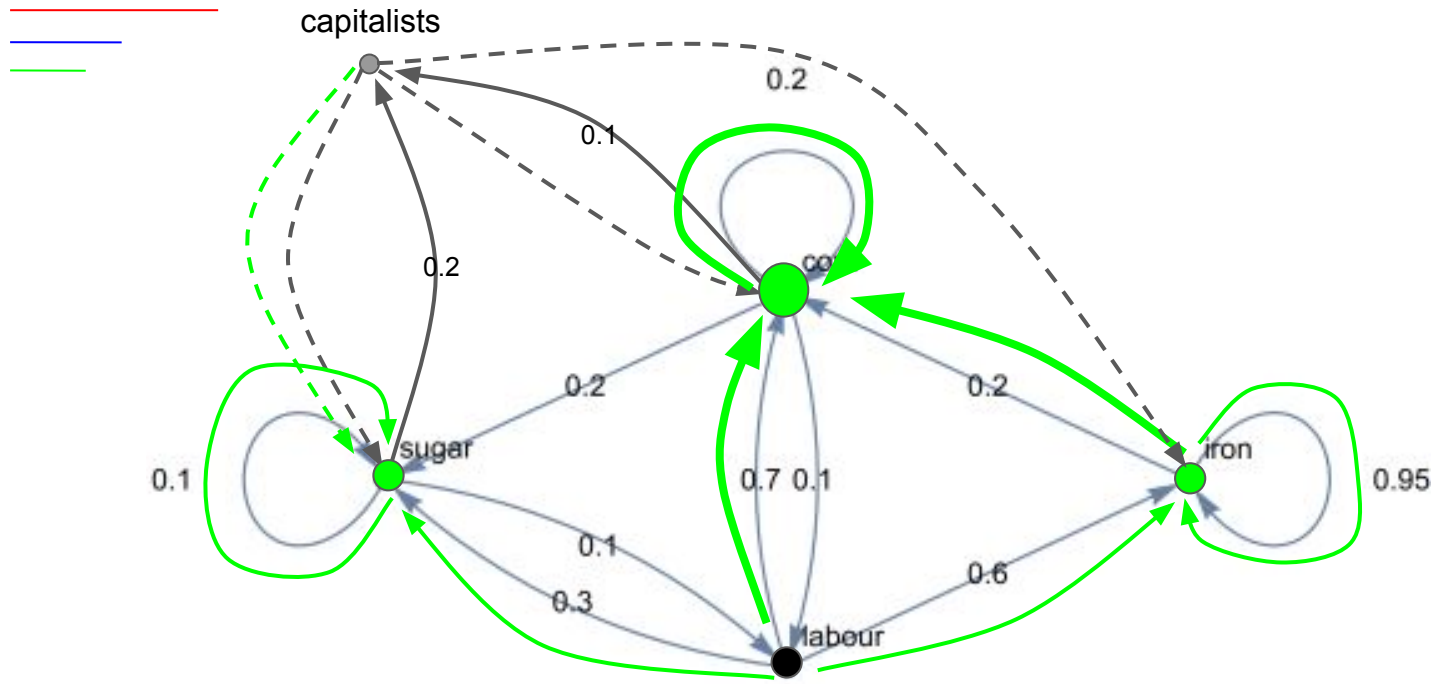
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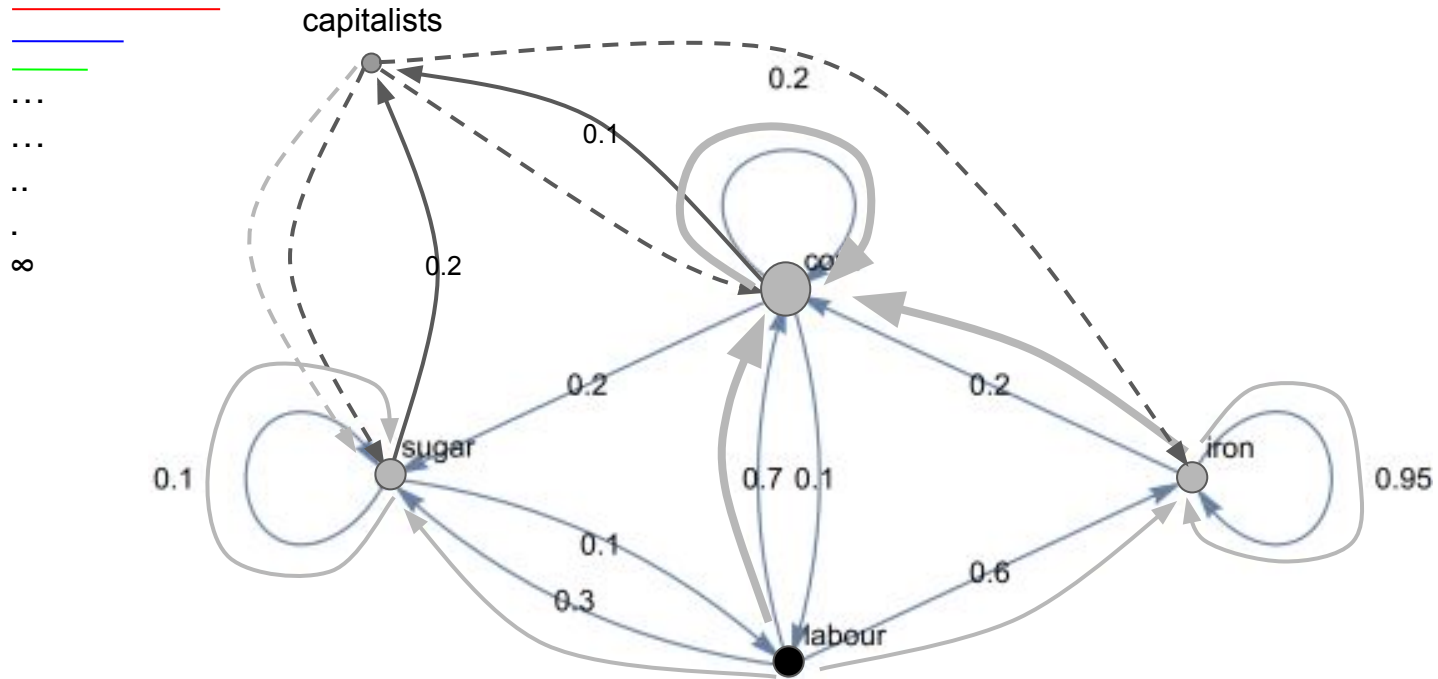
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# Vertical integration iteration $n \rightarrow \infty$



# Super-integrated labour values

$$\underline{\mathbf{v}} = \mathbf{l} (\mathbf{I} + (\mathbf{A} + \mathbf{C}) + (\mathbf{A} + \mathbf{C})^2 + (\mathbf{A} + \mathbf{C})^3 + \dots) \quad \text{vertical integration}$$

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vertical integration

$$= \mathbf{l} (\mathbf{I} - (\mathbf{A} + \mathbf{C}))^{-1}$$

vertically super-integrated subsystem

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$$= \mathbf{I} + \underline{\mathbf{v}}\mathbf{A} + \underline{\mathbf{v}}\mathbf{C}$$

direct plus indirect plus  
super-indirect labour



# Vertical integration

- How much coexisting labour is supplied to produce a commodity?
- Answer: classical labour values  
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- But did we really count all the coexisting labour? **No.**

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 $\mathbf{v} = \mathbf{vA} + \mathbf{l}$
- But did we really count all the coexisting labour? **No.**
- Correct answer: super-integrated labour values  
 $\underline{\mathbf{v}} = \underline{\mathbf{vA}} + \underline{\mathbf{vC}} + \mathbf{l}$

# Super-integrated labour values

- The capitalist consumption matrix,  $\mathbf{C}$ , is a function of the technique,  $\mathbf{A}$  and  $\mathbf{I}$ , and real income,  $\mathbf{w}$  (real wage) and  $\mathbf{c}$  (capitalist consumption).

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- Hence,  $\mathbf{lq} = \mathbf{v}(\mathbf{w} + \mathbf{c}) = \underline{\mathbf{v}}\mathbf{w}$

# Equilibrium prices and labour costs

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- Theorem:

The prices of a steady-state economy are proportional to super-integrated labour values,  $\mathbf{p} = \underline{\mathbf{v}} w$ , where  $w$  is wage rate.



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- “Labour embodied” equals “labour commanded” even with “profits on stock”
- A general theory:
  - Technical measures of labour value
  - Social measures of labour value

## Further details

- “The general theory of labour value”.  
[ianwrightsite.files.wordpress.com/2017/04/general-theory-labour-value2.pdf](http://ianwrightsite.files.wordpress.com/2017/04/general-theory-labour-value2.pdf)
- “A category mistake in the classical labour theory of value”. *Erasmus Journal for Philosophy and Economics* 7 (1), 27–55. 2014.
- “Marx’s transformation problem and Pasinetti’s vertically-integrated subsystems”. Forthcoming in the *Cambridge Journal of Economics*.
- “The Law of Value: A contribution to the classical approach to economic analysis”. PhD Thesis, Open University. 2015.

Additional material