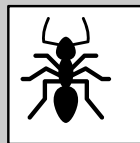


# ECONOMIC AND BUSINESS HISTORY 22/23

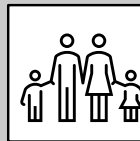
## LECTURE 4 - THE INDUSTRIOUS REVOLUTION



### PLAN



1. Industrious



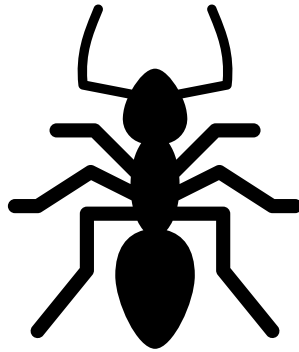
2. Family, Labour and Work



3. Intensity

# 1. ‘Industrious Revolution’

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## “Industrious Revolution”

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The term was first used in Japan (by Hayami in 1967) to describe the Japanese labour-intensive path to economic growth, in contrast with the capital-intensive model of the Industrial Revolution

In the 1990s, this insight was developed by US economist Jan De Vries (The Industrious Revolution, 2008) to capture the changes in North Atlantic households since **1650**.

For De Vries, changes in family economy preceded the technological changes in the industry that led to advances in industrial productivity (i.e. The “Industrial Revolution”).

In order to understand this, it is vital to understand the *European Marriage Pattern* (EMP)

# "European Marriage Pattern"

This was possible under what is called the *EMP* (*European Marriage Pattern*), by contrast with Eastern values, practices and family models (most of all in India and China)

- Marriage is a decision made by the bride and the groom (i.e., not arranged by their families)
- Marriage does not occur in the early child-bearing years
- Relatively low rates of matrimony (high prevalence of 'singletons')

This creates some incentives that also increase productivity; families have more flexibility to adapt to market conditions

- Independent working life before marriage (both male and female)
- Savings
- Acquisition of skills

## Industrious Revolution (in theory)

Households combine their productive resources (labour and intermediate commodities in order to maximise the **utility** of its members.

- This utility is measured in goods and services effectively consumed ( $Z$ ), which require **market-acquired goods** ( $x$ ) and **time** ( $T$ )

- $Z_i = f(x_i, T_i)$

Households operate under time-constraints and have to divide  $T$  into leisure ( $l$ ; which includes the time spent in consumption), paid labour ( $w$ ; time dedicated to acquire the money to buy goods) and domestic labour ( $d$ ; i.e., time spent in transforming  $x$  goods into  $Z$ )

- $T = T_d + T_l + T_w$

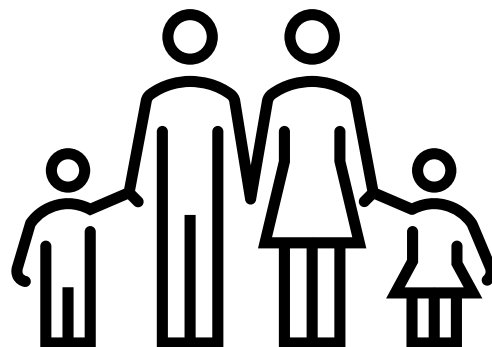
# Industrious Revolution (in theory) 2

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- Families operate under time constraints!
  - “It’s great to buy all these books; but it would be even better to buy the time to read them” (Schopenhauer 1851)
- In this framework, families negotiate the allocation of time, knowing that waged labour implies less available leisure and/or domestic production
- The consequences are changes in the household choices
  - A rise in the wage level would increase the opportunity cost of leisure and of transforming intermediate commodities into Z goods. Thus, it would intensify the demand for ready-to-consume commodities (x)

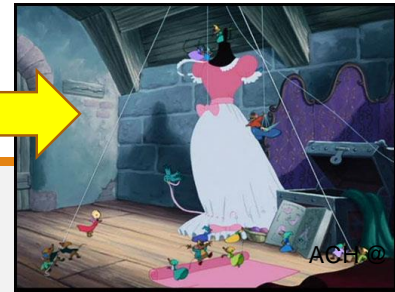
## 2 Labour, Work and Family

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# From Do-it-Yourself to Prêt-à-Porter

- From 1650, prior to major technological changes, NW European (and American) families reallocate their productive resources in order to increase their contribution to the labour market
- Thus, even before new technologies arrived, labour supply increases (L is used more intensely): increase participation of more family members; less holy days; some specialization
- This choice did not respond to increase in wages (they had increased before, 15th cent.) but to the increase in the utility that families could extract from the market



## The Industrious Revolution in Supply and Demand

### > LABOUR SUPPLY

Unlike previous periods, leisure and household production are forgone for more paid work:

- Incentive for specialization
- Incentive for increasing working time (end of “Saint Monday”, holy days removed)
- Competition in labour market

### > CONSUMPTION

Wider choice of (value-added, non-essential) marketable commodities

- High-Tech (clockwork, engravings, books, etc...)
- Colonial products
  - Tobacco
  - Cocoa
  - Tea
  - Coffee
  - Sugar
  - Spirits

These products cannot be produced at home and are compatible with leisure

Specialization also drives down the price of essential goods, making the opportunity cost of domestic production higher

# Social Incentives

Another feature of the IR is that leisure and consumption became intertwined

- Leisure become more attractive AND more expensive; hence it incentivated paid work
- This was the foundation for the emergence of many new industries (potteries, furniture) and trades that supplied ready-made goods



## 3. Labour Intensity



# The result: Increasing Labour intensity

Faced with new opportunities of consumption and (more consumeristic) leisure, families stepped up their working time, thus each labour unit became more productive over the year (via specialization or simply by increasing working hours)

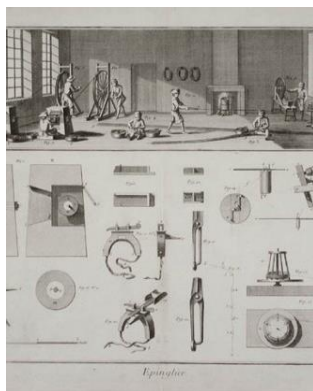
By doing so, families began to acquire a higher share of finished goods, forgoing the domestic transformation and spending more leisure time

The **opportunity cost** of domestic work increased

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## Households Specialization

- Thus, simultaneously, families resorted more often to the Labour Market AND to the Commodities Market
- Without this rise of aggregate Demand for commodities AND aggregate Supply (of Labour), there would neither be incentive to the productivity increases in factories nor could factories attract workers



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Street sellers and the water carrier by Jean Michelin (1650)

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