What is inflation, what are its causes, and why is an understanding of it important?

Philip Lawn
Torrens University
E-mail: phil.a.lawn@gmail.com

20 November 2021

What is inflation?

- **Inflation refers to the *ongoing* rate of increase in prices over a specified period of time – it does not refer to a one-off price increase**

- **There are different types of inflation:**
  - **<u>General price level inflation</u> (Consumer Price Index or CPI), which applies to the prices of a basket of newly produced *final* goods and services (i.e., the stuff of which GDP is comprised)**
  - **<u>Asset-price inflation</u>, which applies to the prices of various assets (e.g., property, other durable real assets, shares, and bonds; the latter two being financial assets)**
  - **<u>Commodity price inflation</u>, which applies to the prices of natural resources and agricultural output**
  - **<u>Wage inflation</u>, which applies to the wages and salaries of workers**

- **The last two forms of inflation often lead to general price level inflation – 1973 oil price rises led to general price level inflation and wage-price spiral in 1974 (Aust: GPLI was 17%; WI was 25%)**

- **See Figure 1**

What is inflation?

- **See Figure 1**
- **Because GPLI (the CPI) refers to new final goods and services (with a couple of exceptions), GPLI refers to the stuff (GDP) in the bathtub**
- **GPLI (the CPI) doesn't apply to most stuff sold outside the bathtub, yet the prices of stuff outside of the bathtub can have significant implications for the cost of living for many people**
- **Prices of the stuff outside the bathtub invariably reflect economic rents**
  - **They can have large distributional effects**
  - **This is where some of the great fortunes are made – unearned income in many instances; reshuffling of financial assets**
  - **Prices are driven up by increased demand often financed by loans (advances)**
  - **Prices backed by huge private sector debts (financial liabilities)**
- **Inflation is a macroeconomic price-level signal – there is a need to recognise it and understand its causes to ensure right policy response**

What are the main forms of general price level (CPI) inflation?

1. **Demand-pull inflation (demand-side of economy)**
   - Occurs when total spending on new final g&s exceeds the productive capacity of the economy (bath-tub overflows with water)
   - Quite rare – unlikely to have occurred in Australia since at least the early-1970s

2. **Cost-push inflation (supply-side of economy)**
   - Occurs when the cost of producing new final g&s rises rapidly, usually due to rapid rises in cost of inputs (e.g., labour or raw materials/energy)
   - More common form of CPI inflation

- **Note: Because there are demand-side and supply-side forces at play with regard to all prices, there are elements of one form of CPI inflation in the other**

- **Wage-price inflation spirals – increased cost of production drives up the prices of new g&s; wages rise to catch up; prices rise, and so on**

Demand-pull inflation

- **Because demand-pull inflation occurs when total spending exceeds productive capacity of the economy:**
  - **Quelling requires reducing total spending**
  - **Policy response?**
    - **Reduced government spending (fiscal policy)**
      - **Easy to do, although more difficult to manage the response (i.e., cut spending where?)**
      - **Easy to achieve desired spending reduction (total spending cut = cut in government spending, although has multiplier effects)**
      - **Eradicates CPI inflation fairly quickly**
    - **Reduced private-sector spending**
      - **Increase taxes (fiscal policy) – reduces private-sector after-tax incomes and therefore private-sector spending**
      - **Increase interest rates (monetary policy) – supposedly reduces private-sector spending by increasing the cost of borrowing (?)**
      - **Impact on total spending less certain because impact is 'indirect'**
      - **Question mark over impact of interest rates on spending – one person's interest payment = another person's interest income (distributional impact only)**
      - **Rising interest rates to reduce spending often has greatest impact on the most vulnerable (low-income people with mortgages)**
      - **Slower eradication of CPI inflation**

Cost-push inflation

- **Reflects structural weaknesses and deficiencies in the economy**
- **For example:**
  - **Rising labour costs that increase the cost of production may be due to poor educational/training arrangements – surpluses of some occupations and shortages of other occupations**
  - **Rising raw materials/energy costs that increase the cost of production may be due to poor resource management; poor energy delivery systems; excessive reliance on too few energy sources (e.g., oil in the early-1970s and still; coal)**
  - **Policy response?**
    - **Usual response in recent decades is to raise interest rates to reduce private-sector spending**
      - **Wrong response! – doesn't deal with structural deficiencies**
      - **Involves treating cost-push inflation as if a case of demand-pull inflation – led to 1970s stagflation (high inflation and high unemployment)**
    - **Proper response is to overcome structural weakness**
      - **This takes time – CPI inflation is prolonged; Inflation is bad but not end of the world; prolonged spell of inflation is the price paid for poor policies of the past**
      - **One of biggest obstacles to environmental policy is fear of inflation if we deal with weakness (e.g., emissions targets & pollution taxes)**

Why is an understanding of inflation important?

- **Job Guarantee v UBI**
  - **UBI – doesn’t directly put people seeking work into work!**
    - **Because it is universal, it is paid to everyone, including the ultra-rich**
    - **Increased spending leads to increased demand for g&s – this can lead to demand-pull inflation if there is inadequate productive capacity**
    - **In fact, if UBI triggers labour withdrawal, then productive capacity is reduced – this would exacerbate the demand-pull inflation problem**
    - **If UBI set at minimum income, demand-pull inflation is inevitable**
    - **Response?**
      - **Would have to reduce government spending in other areas or raise taxes**
      - **Former would reduce access to public goods that low-income people often rely heavily on**
      - **Higher taxes would erode the minimum income – no longer a minimum basic income**

Why is an understanding of inflation important?

- **Job Guarantee v UBI**
  - **JG – puts people seeking work into work!**
    - **Only applies to previously or would-be unemployed people**
    - **The g&s produced by the JG workers would match the increased JG spending – increased spending absorbs idle productive capacity**
    - **JG spending by government ceases when last unemployed person walks through JG office seeking paid work**
      - **No demand-pull inflation – no need to increase taxes or cut government spending elsewhere**
    - **Minimum living wage paid to JG employees sets a wage floor – the government doesn't compete with the private sector for labour; no wage inflation**
      - **No cost-push inflation**

    - **What if stuff produced by JG workers are public goods that are not sold in standard markets? Couldn't that trigger demand-pull inflation?**
      - **Yes, and government may have to increase taxes to free up real resources to prevent inflation**
      - **But tax hike needed to quell inflation would be far less than with a UBI – the necessary tax hike could be entirely imposed on the rich**

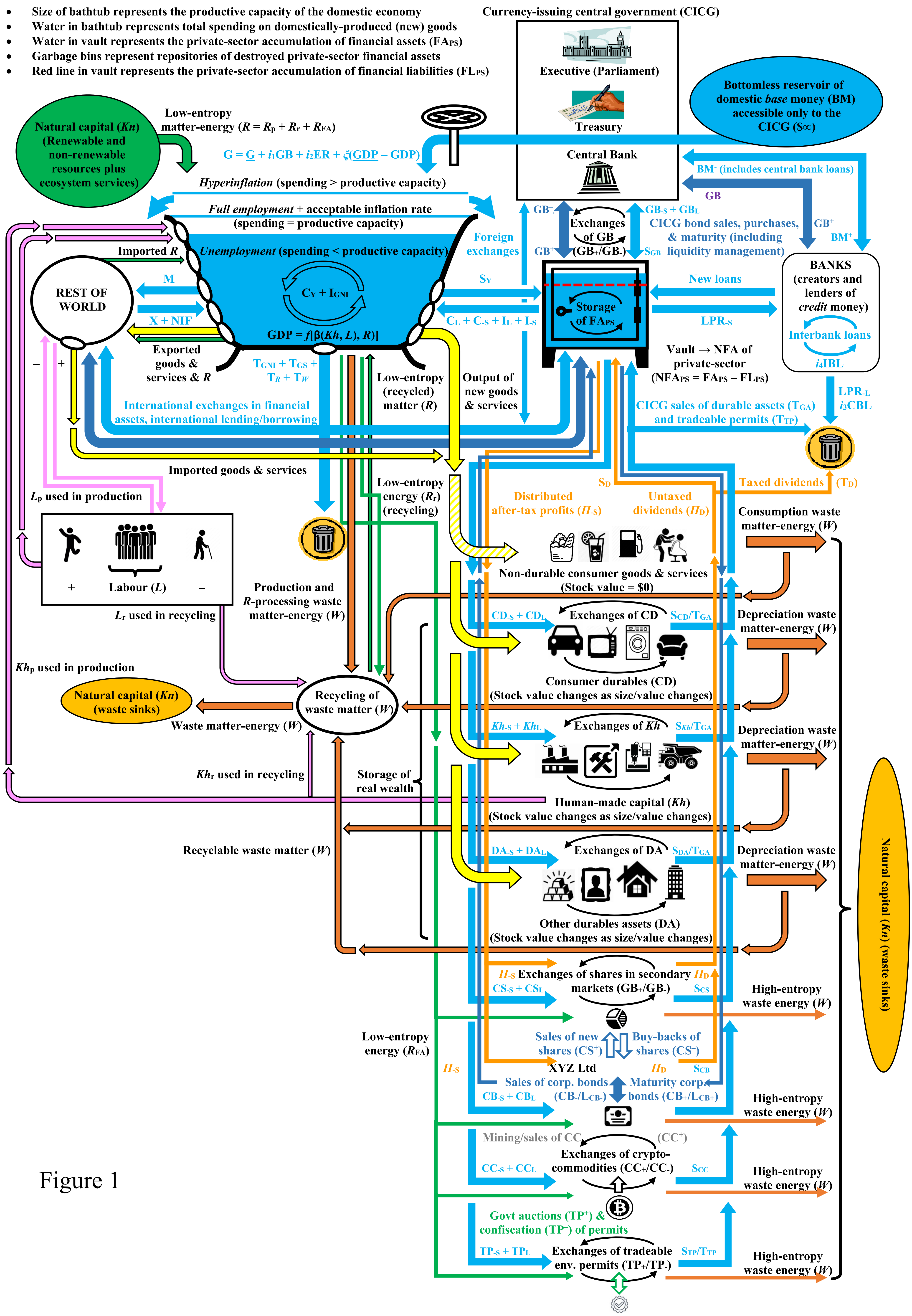
Why is an understanding of inflation important?

- **Treating cost-push inflation as if it were demand-pull inflation**
  - **Since the 1970s, policy response to cost-push inflation is one that is more applicable to demand-pull inflation – that is, reducing private-sector spending by hiking interest rates**

  - **We have no JG and governments have abandoned the full employment objective**

  - **Reduced total spending in the belief that this will quell cost-push inflation has meant:**
    - **Unnecessarily high labour underutilisation rates since 1970s – the NAIRU approach to quelling inflation**
    - **Has quelled inflation, but in time-consuming manner, and only by gradually lowering people's inflationary expectations (which reduces wage rise demands and price hikes by businesses)**

  - **As mentioned before, since cost-push inflation is the reflection of structural weaknesses in the economy, best to deal with by overcoming the weaknesses – will solve other pressing issues**


• Size of bathtub represents the productive capacity of the domestic economy
• Water in bathtub represents total spending on domestically-produced (new) goods
• Water in vault represents the private-sector accumulation of financial assets (FAPS)
• Garbage bins represent repositories of destroyed private-sector financial assets
• Red line in vault represents the private-sector accumulation of financial liabilities (FLPS)
Currency-issuing central government (CICG)
Executive (Parliament)
Treasury
Central Bank
Bottomless reservoir of domestic base money (BM) accessible only to the CICG ($∞)
Natural capital (Kn) (Renewable and non-renewable resources plus ecosystem services)
Low-entropy matter-energy (R = Rp + Rr + RFA)
G = G + i1GB + i2ER + ξ(GDP – GDP)
Hyperinflation (spending > productive capacity)
Full employment + acceptable inflation rate (spending = productive capacity)
Unemployment (spending < productive capacity)
CY + IGNI
GDP = f[β(Kh, L), R)]
Imported R
REST OF WORLD
M
X + NIF
Exported goods & services & R
TGNI + TGS + TR + TW
International exchanges in financial assets, international lending/borrowing
Foreign exchanges
SY
CL + C-S + IL + I-S
GB-
GB+
Exchanges of GB (GB+/GB-)
GB-S + GBL
SGB
CICG bond sales, purchases, & maturity (including liquidity management)
BM- (includes central bank loans)
GB-
GB+
BM+
BANKS (creators and lenders of credit money)
Interbank loans
i4IBL
New loans
LPR-S
Storage of FAPS
Vault → NFA of private-sector (NFAPS = FAPS – FLPS)
LPR-L
i3CBL
CICG sales of durable assets (TGA) and tradeable permits (TTP)
Low-entropy (recycled) matter (R)
Output of new goods & services
Imported goods & services
Lp used in production
+ Labour (L) –
Lr used in recycling
Low-entropy energy (Rr) (recycling)
SD
Distributed after-tax profits (Π-S)
Untaxed dividends (ΠD)
Taxed dividends (TD)
Consumption waste matter-energy (W)
Non-durable consumer goods & services (Stock value = $0)
Production and R-processing waste matter-energy (W)
CD-S + CDL
Exchanges of CD
SCD/TGA
Depreciation waste matter-energy (W)
Consumer durables (CD) (Stock value changes as size/value changes)
Khp used in production
Natural capital (Kn) (waste sinks)
Recycling of waste matter (W)
Waste matter-energy (W)
Kh-S + KhL
Exchanges of Kh
SKh/TGA
Depreciation waste matter-energy (W)
Khr used in recycling
Storage of real wealth
Human-made capital (Kh) (Stock value changes as size/value changes)
Recyclable waste matter (W)
DA-S + DAL
Exchanges of DA
SDA/TGA
Depreciation waste matter-energy (W)
Other durables assets (DA) (Stock value changes as size/value changes)
Natural capital (Kn) (waste sinks)
Π-S Exchanges of shares in secondary ΠD markets (GB+/GB-)
CS-S + CSL
SCS
High-entropy waste energy (W)
Low-entropy energy (RFA)
Sales of new shares (CS+)
Buy-backs of shares (CS–)
XYZ Ltd
Π-S
ΠD
SCB
Sales of corp. bonds (CB-/LCB-)
Maturity corp. bonds (CB+/LCB+)
CB-S + CBL
High-entropy waste energy (W)
Mining/sales of CC
(CC+)
Exchanges of crypto-commodities (CC+/CC-)
CC-S + CCL
SCC
High-entropy waste energy (W)
Govt auctions (TP+) & confiscation (TP–) of permits
TP-S + TPL
Exchanges of tradeable env. permits (TP+/TP-)
STP/TTP
High-entropy waste energy (W)
Figure 1