Labour Account –Session 7.2

Balancing a Labour Account an Australia example

Presented by Jennifer Humphrys

Balancing the quadrants

JOBS

Filled Jobs	=	Number of Main Jobs	+	Number of Secondary Jobs
+				
Job Vacancies				
=				
Total Jobs				

PERSONS

Employed Persons	=	Number of Main Jobs (Total Economy Level)		
+				
Unemployed Persons	+	Underemployed Persons	=	Underutilised Persons
=				
Labour Force				

VOLUME

Hours Actually Worked	+	Hours Sought but not Worked	=	Available Hours of Labour Supply
=		=		
Hours Paid For		Hours Sought by Unemployed		Hours Actually Worked
=		+		/
Ordinary Time Hours Paid for		Additional Hours Sought by Underemployed		Filled Jobs
+				=
Overtime Hours Paid for				Average Hours worked per Job

PAYMENTS

Total Labour Cost	/	Hours actually worked / Hours actually paid	=	Ave. labour cost per hour worked / Ave. labour cost per hour paid
=				
Compensation of Employees	+	Labour Income from Self-Employment	=	Total Labour Income
+				/
Employment Related Costs				Employed Persons
+				=
Payroll Tax				Average Labour Income per Employed Person
–				
Employment Subsidies				

- In compiling the Labour Account, residual differences remain between the estimated number of filled jobs based on business sources and those derived from household sources.
- These differences remain after making adjustments for known conceptual and scope differences.
- They represent measurement error in the respective sources, and are reflected in the "statistical discrepancy" series highlighted in the "unbalanced" tables.

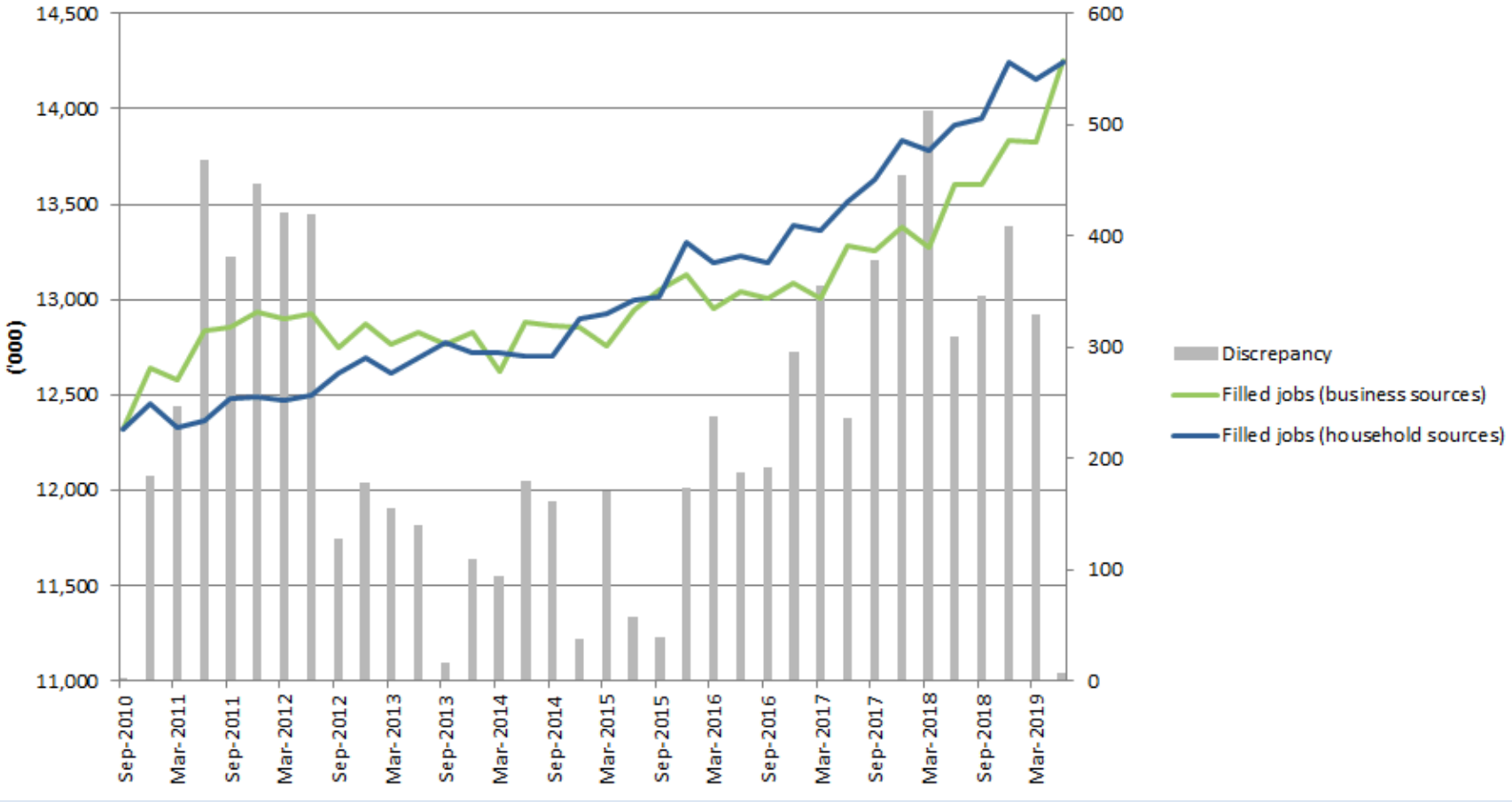
- In the balanced tables, separate business and household estimates have been replaced by a single "filled jobs" estimate.

- Consequential adjustments are also made to estimates of employed persons, hours worked and hours paid for.
- The harmonised, or "balanced", filled jobs series are based on a more detailed industry by industry investigation of the underlying sources of measurement error.

Current Australian Imbalance

- In original terms the discrepancy between household sources and business sources was six thousand jobs, or 0.04% of the household estimate, in the June quarter 2019.

FILLED JOBS DISCREPANCY, SEPTEMBER QTR 2010 TO JUNE QTR 2019



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Australia uses a 7 Step process

Step one – Balance each industry individually to the demand or supply side

- The following industries were balanced to the household sources side:
  - Division A (Agriculture)
  - Division S (Other Services).
- Movements from business side but reduced level:
  - Division L (Rental, Hiring and Real Estate Services);
- All other industries were balanced to the business sources side.

Step two – Adjustment for OMUEs (self-employed)

- Owner Managers of Unincorporated Enterprises were reallocated as follows:
  - Division D (Electricity, Gas and Water) – OMUEs were moved to Division E (Construction).
  - Division K (Financial and Insurance Services) – OMUEs were moved to Division M (Professional, Scientific and Technical Services).
  - Division O (Public Administration and Safety) – OMUEs were moved to Division M (Professional, Scientific and Technical Services).

Step three – Minor adjustments for extrapolated year

- The most recent annual estimates, for most industries, are based on data which has been extrapolated from an annual benchmarked level from 2016-17.
- Some minor discretionary adjustments were made to 2017-18 and 2018-19 to bring growth rates in jobs more in line with other indicators, such as COE and GVA.

Step four – Balance to supply at the total economy level

- This approach to balancing was taken for a number of reasons:
  - Supply side estimates of jobs predominantly come from a single source, the Labour Force Survey, unlike demand side estimates which are estimated from a variety of business collections.
  - The Labour Force Survey also provides the official estimate of employment in Australia, and is designed to measure employment levels which are internationally comparable in a consistent manner over time in accordance with recognised ILO definitions.
  - Movements in the numbers of filled jobs at the total economy level on the supply side were more coherent with other available indicators, such as COE and GVA.

Step 5 – Further minor discretionary balancing adjustments

- After balancing the total economy to the supply side, some industries required further minor discretionary balancing adjustments.
- Auto-balancing the remaining imbalance proportionally to the number of jobs.
- Further re-analysis is undertaken to ensure auto-balancer has not impacted movements.

Balancing Adjustments from Jobs flow through to other quadrants

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+				
Job Vacancies				
=				
Total Jobs				

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+				/
Employment Related Costs				Employed Persons
+				=
Payroll Tax				Average Labour Income per Employed Person
–				
Employment Subsidies				

Step 6 – Moving employed persons

- Balancing decisions from the jobs quadrant are fed through to adjustments to the persons quadrant.
- This is based on information from the Linked Employer Employee Dataset on the relationship of secondary job holders and industry relationships.

Step 7 – Moving hours paid across industries

- After the completion of Step six, some industries exhibited unusually high (e.g. Rental, Hiring and Real Estate) or unusually low (e.g. Administrative and Support Services) ratios of hours worked to hours paid for.

- To rectify this, as part of balancing some hours paid for were moved across industries. However, the total hours paid for at the total economy level was not changed.

Key Points

- Jobs Quadrant: the discrepancy in the jobs quadrant is a statistical discrepancy (same concept)
- There is no balancing in the persons quadrant (adjustments from job quadrant are applied)

Key Points

- There is no balancing in the volumes quadrant – as this is **not** a statistical discrepancy.
- Hours paid for are conceptually different to hours worked.
- This difference itself is an indicator of changing employment conditions.

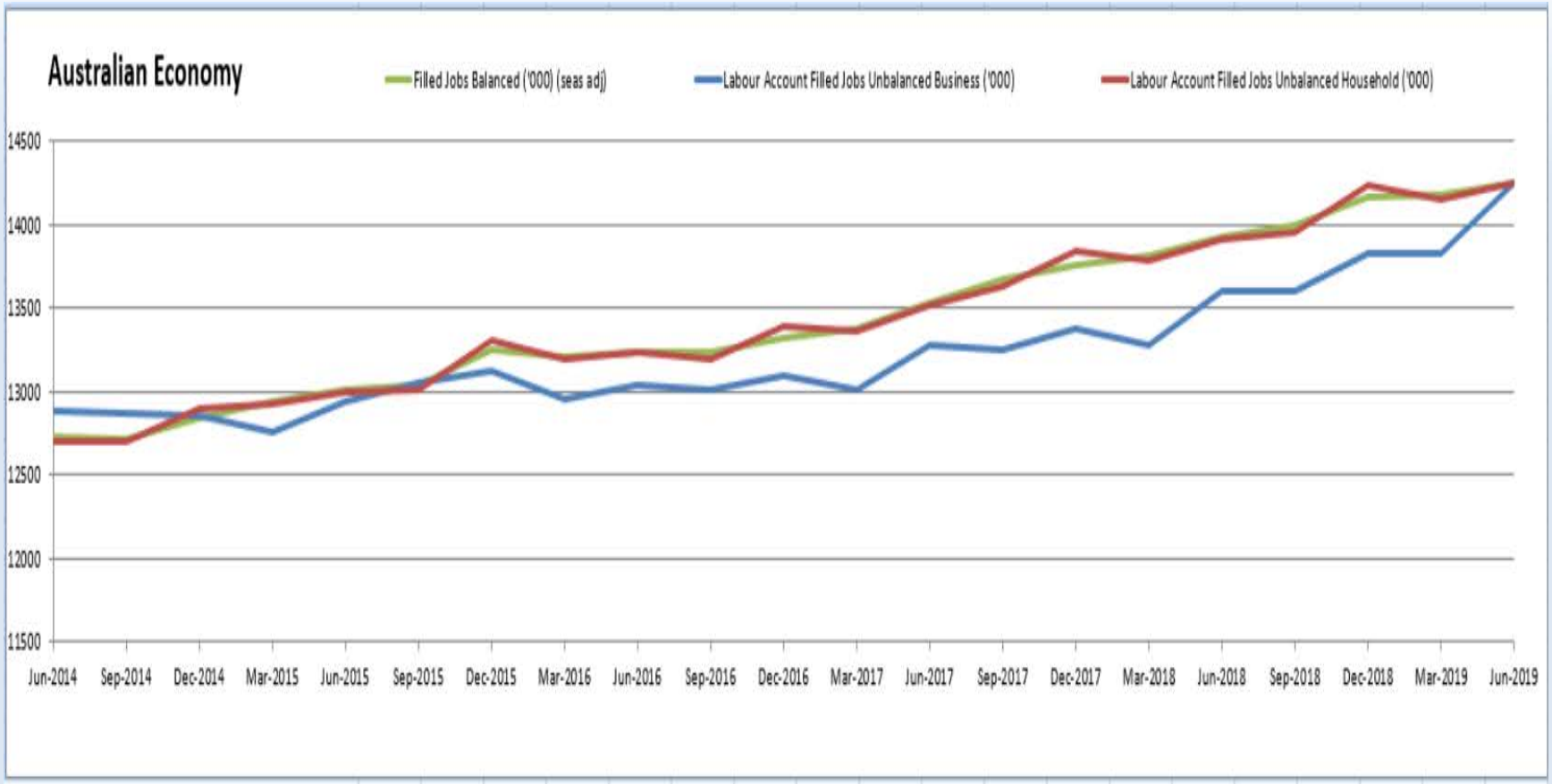
I wish……

- One day we might balance between the Single Touch Payroll (real time admin data) and wages and salaries from National Accounts

How we balance

- Open Sandpit
- Open Jenerator

Results


Australian Economy
Filled Jobs Balanced ('000) (seas adj)
Labour Account Filled Jobs Unbalanced Business ('000)
Labour Account Filled Jobs Unbalanced Household ('000)
14500
14000
13500
13000
12500
12000
11500
Jun-2014
Sep-2014
Dec-2014
Mar-2015
Jun-2015
Sep-2015
Dec-2015
Mar-2016
Jun-2016
Sep-2016
Dec-2016
Mar-2017
Jun-2017
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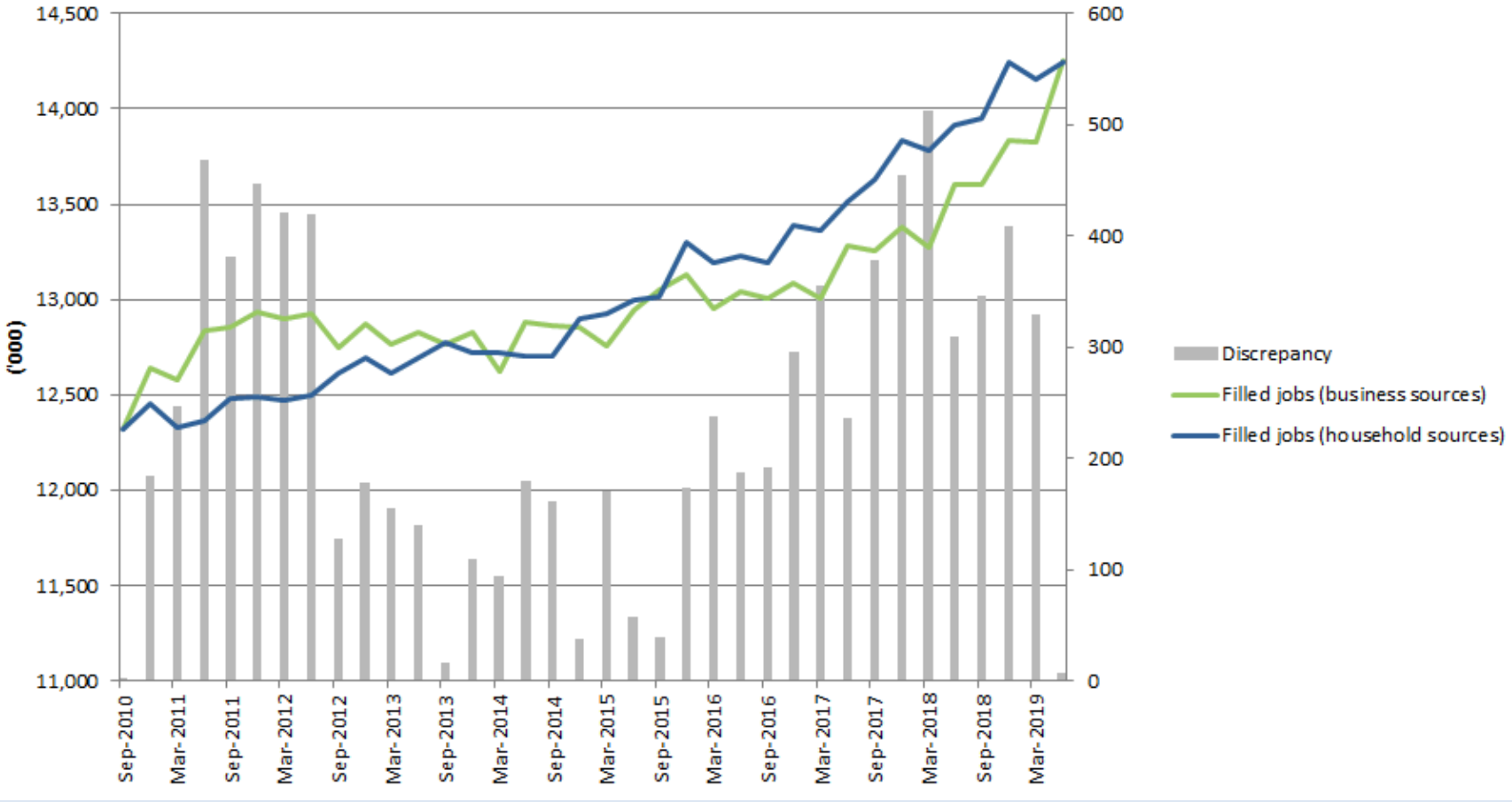
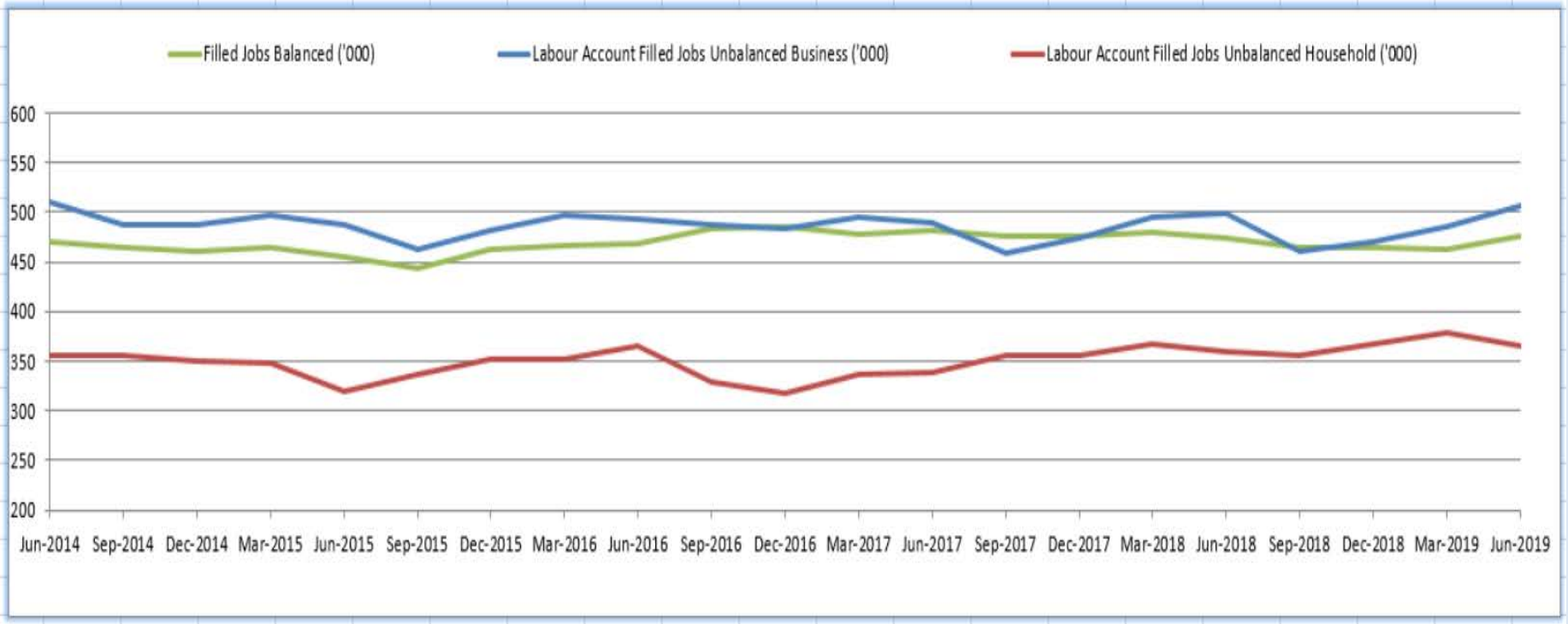
Jun-2018
Sep-2018
Dec-2018
Mar-2019
Jun-2019

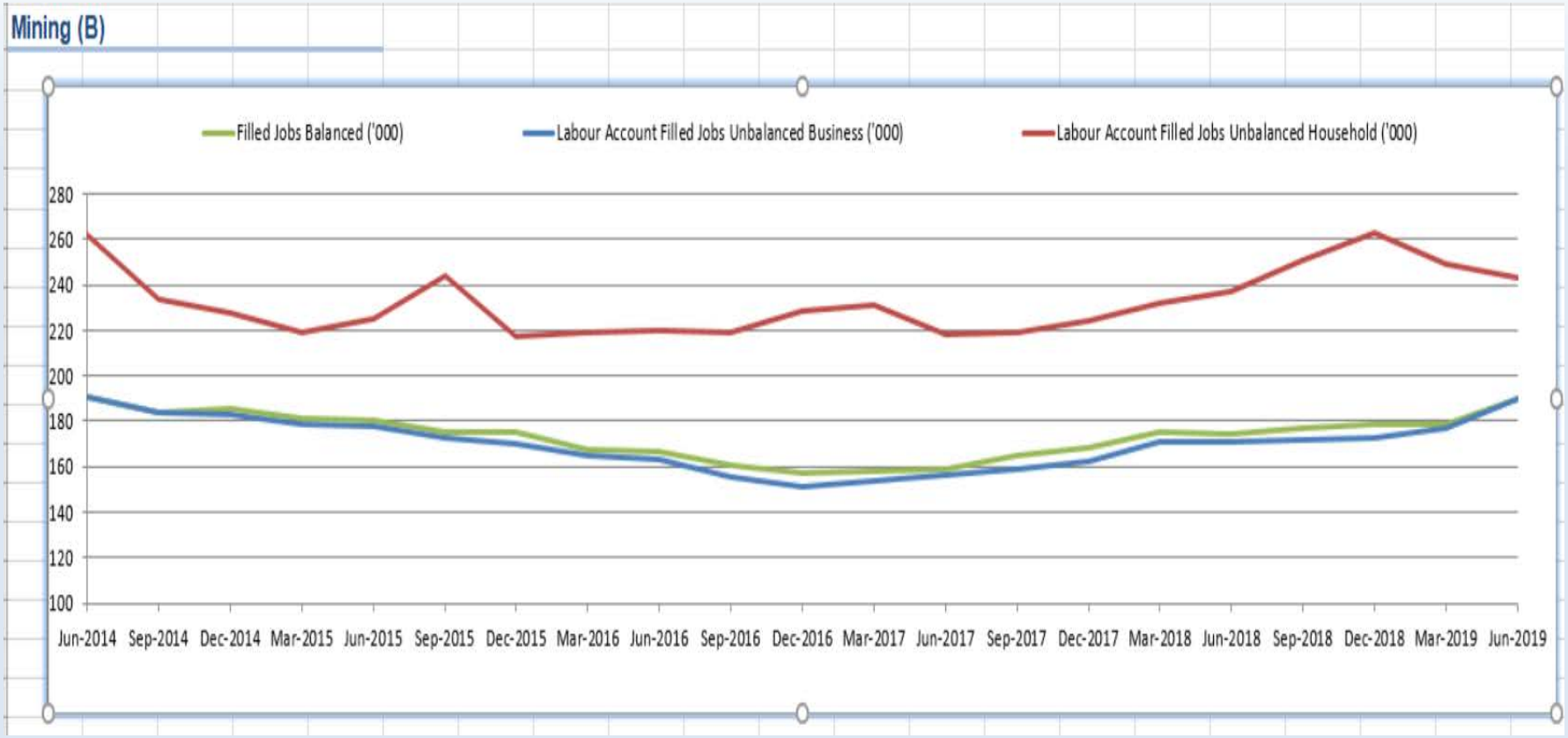
FILLED JOBS DISCREPANCY, SEPTEMBER QTR 2010 TO JUNE QTR 2019



Agriculture, forestry and fishing (A)



Mining (B)


Filled Jobs Balanced ('000)
Labour Account Filled Jobs Unbalanced Business ('000)
Labour Account Filled Jobs Unbalanced Household ('000)
280
260
240
220
200
180
160
140
120
100
Jun-2014
Sep-2014
Dec-2014
Mar-2015
Jun-2015
Sep-2015
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Mar-2016
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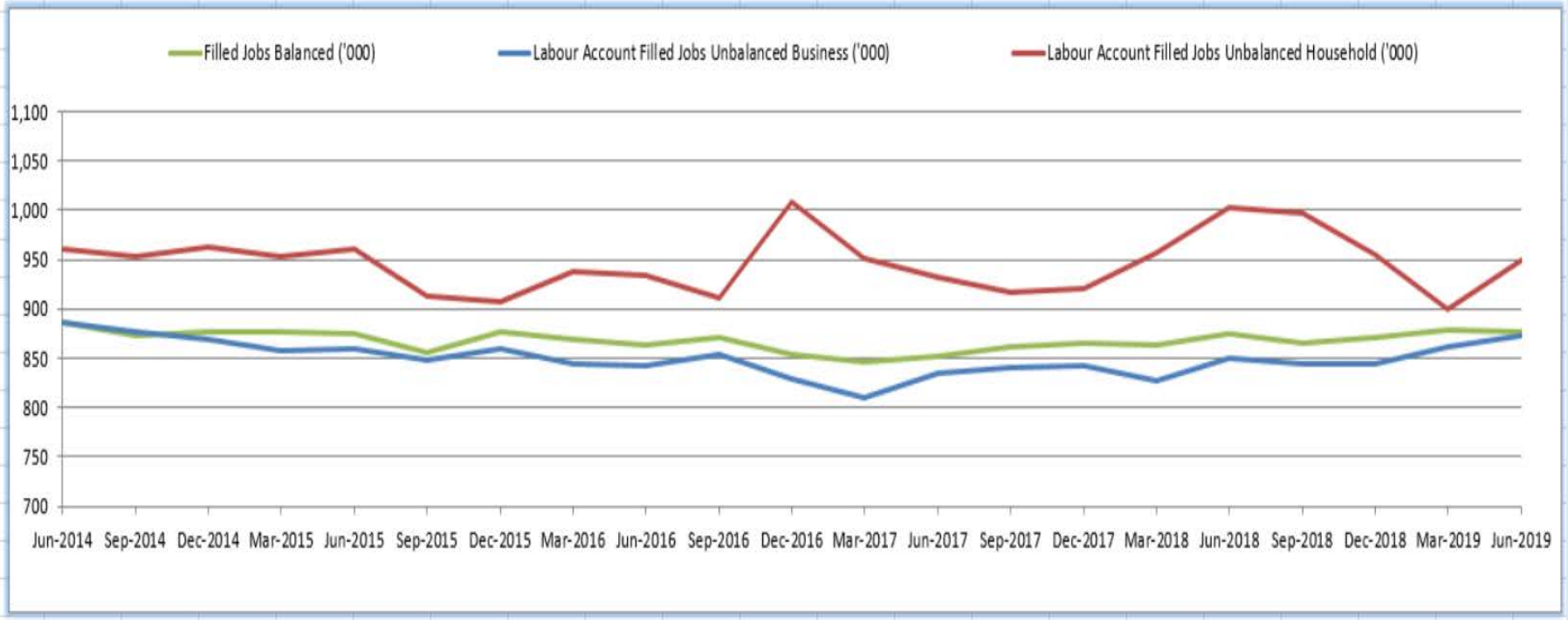
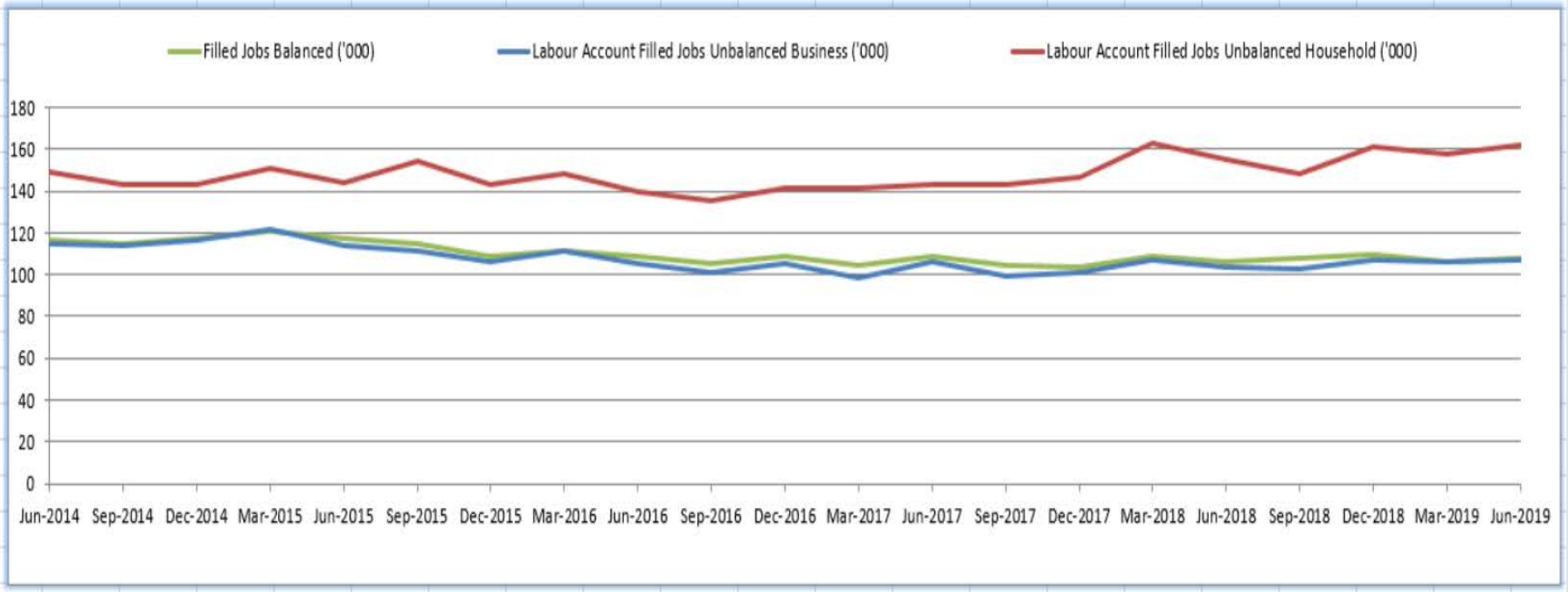
Mar-2019
Jun-2019

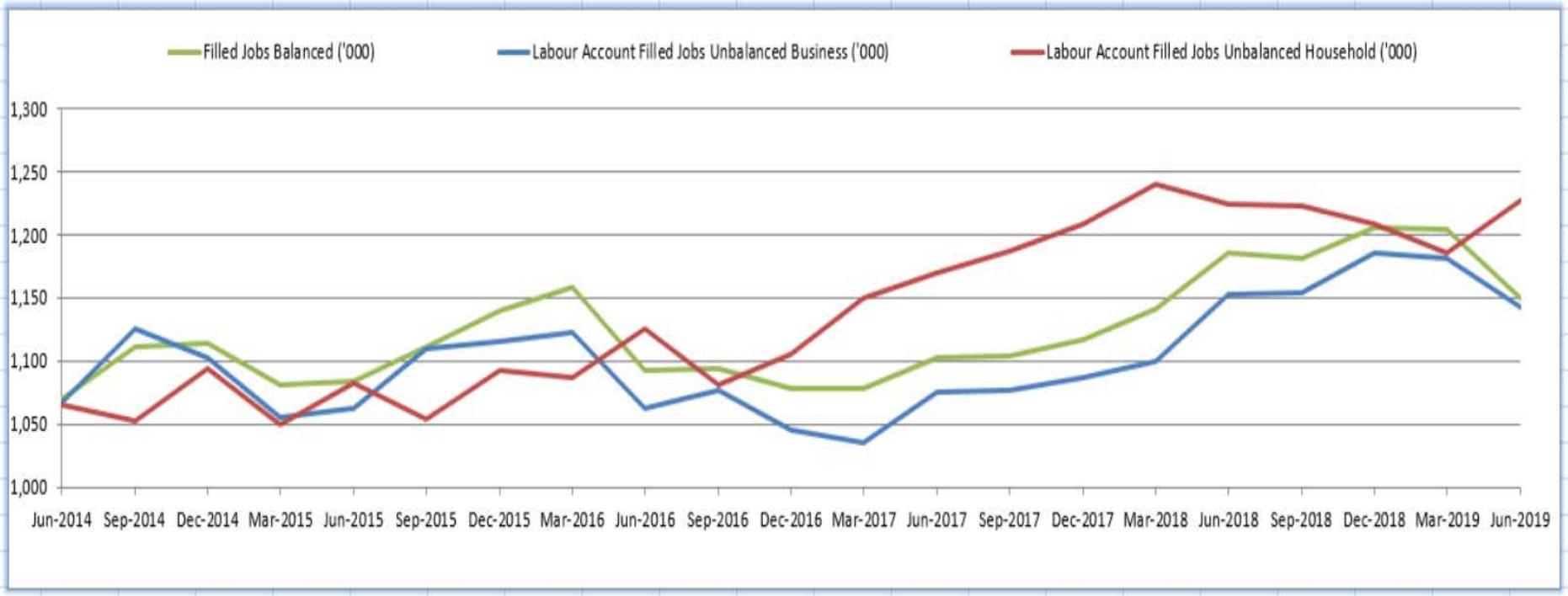
Manufacturing (C)



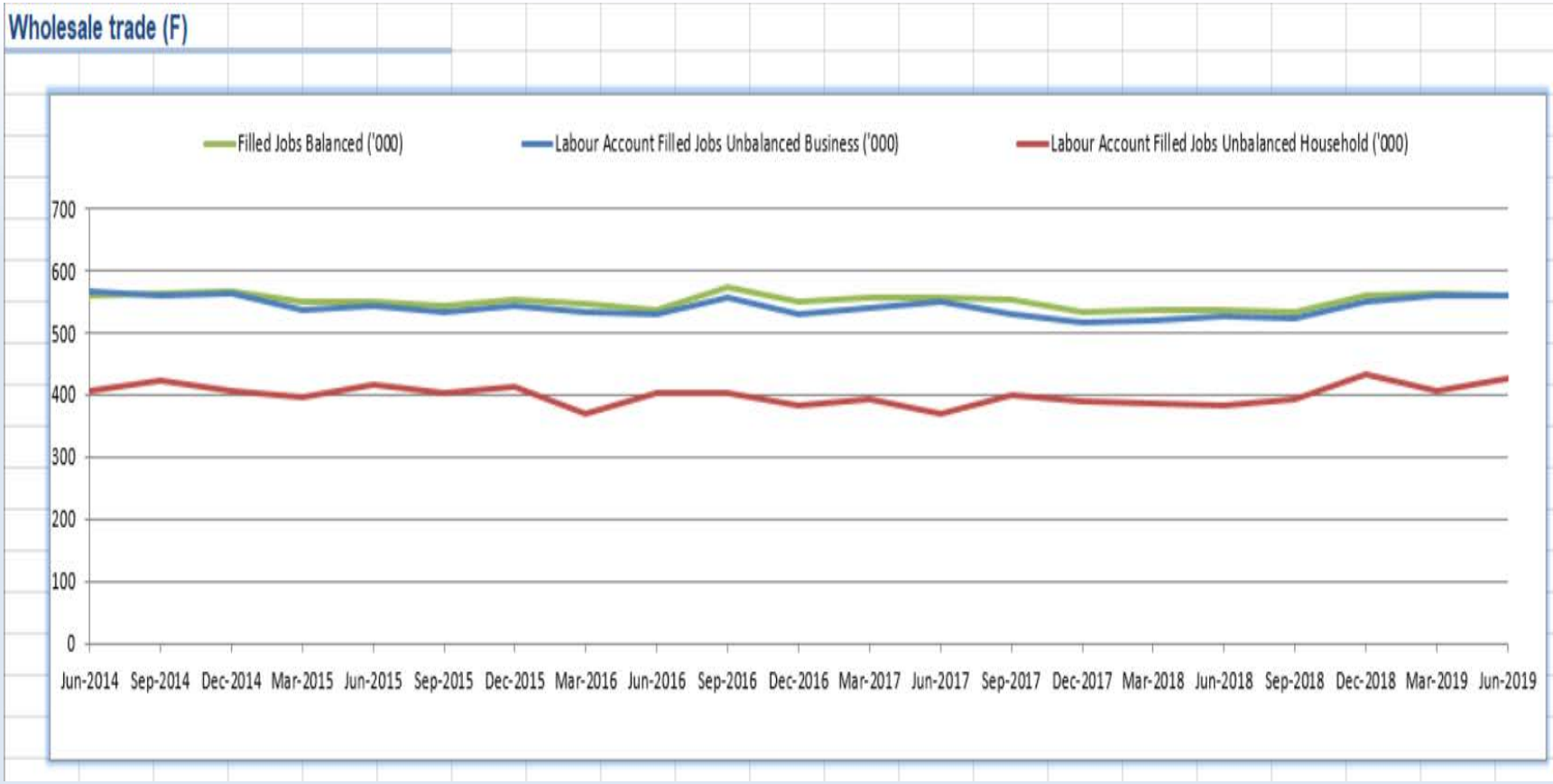
Electricity, gas, water and waste services (D)



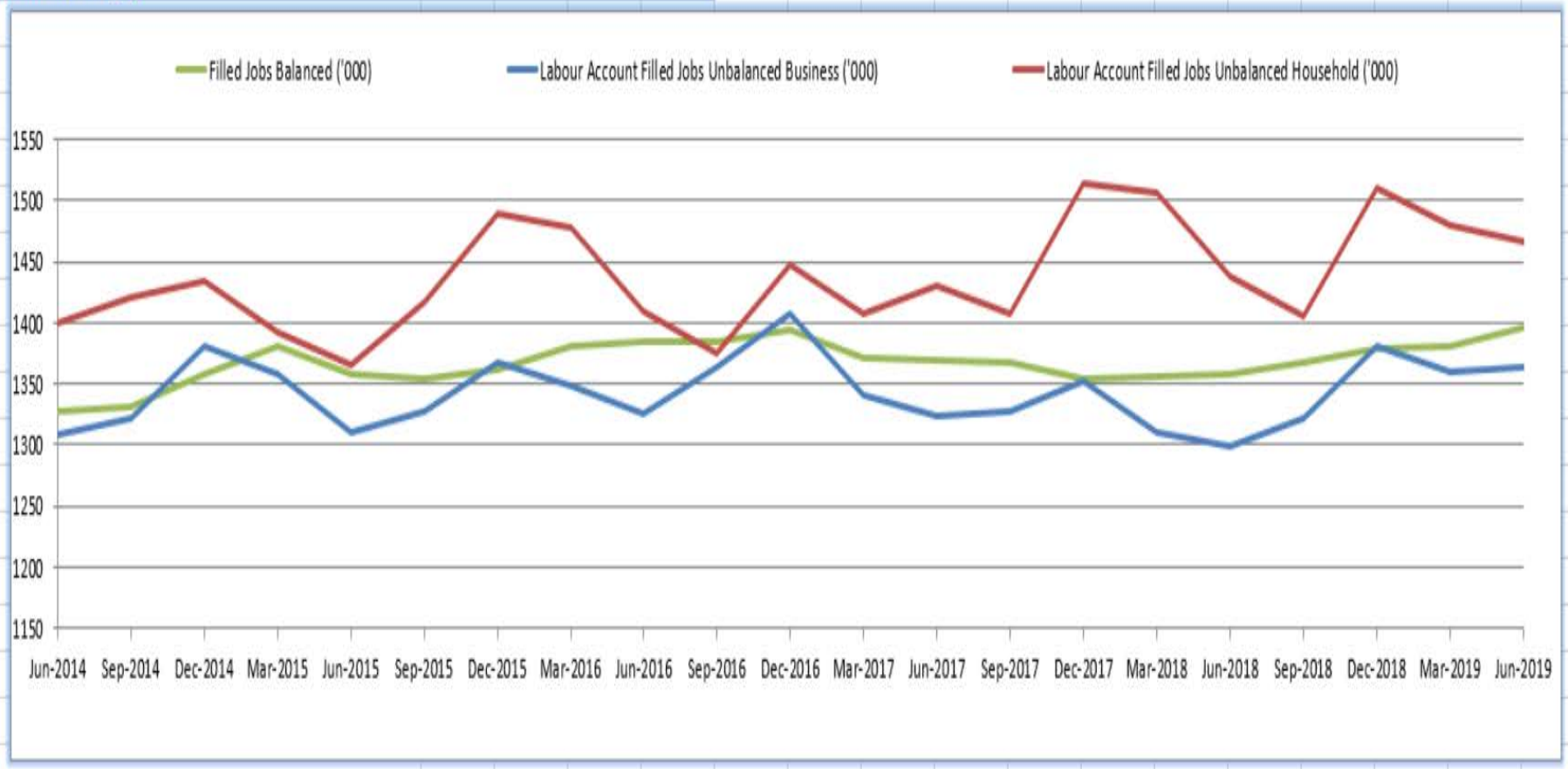
Construction (E)



Wholesale trade (F)



Retail trade (G)



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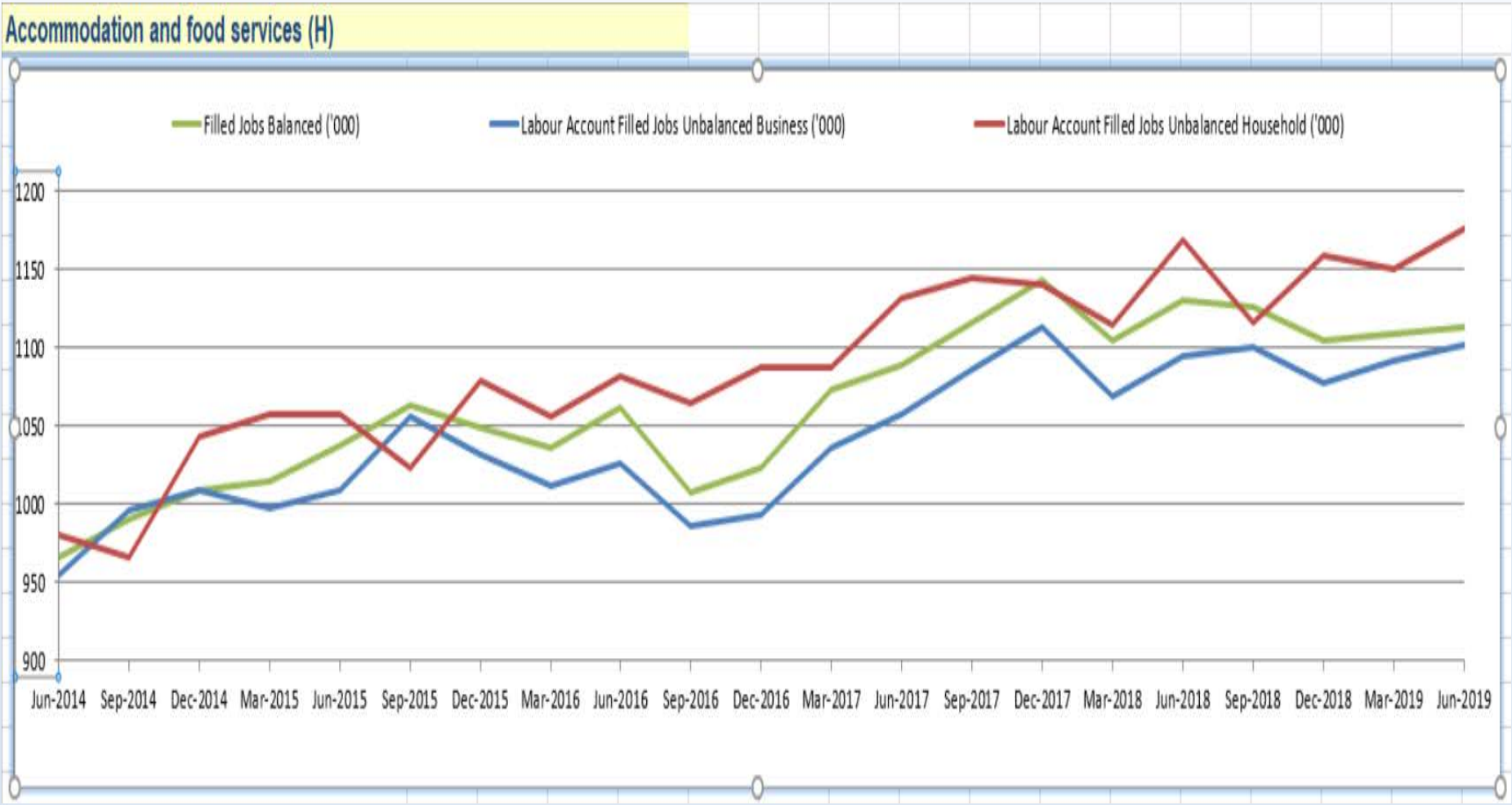
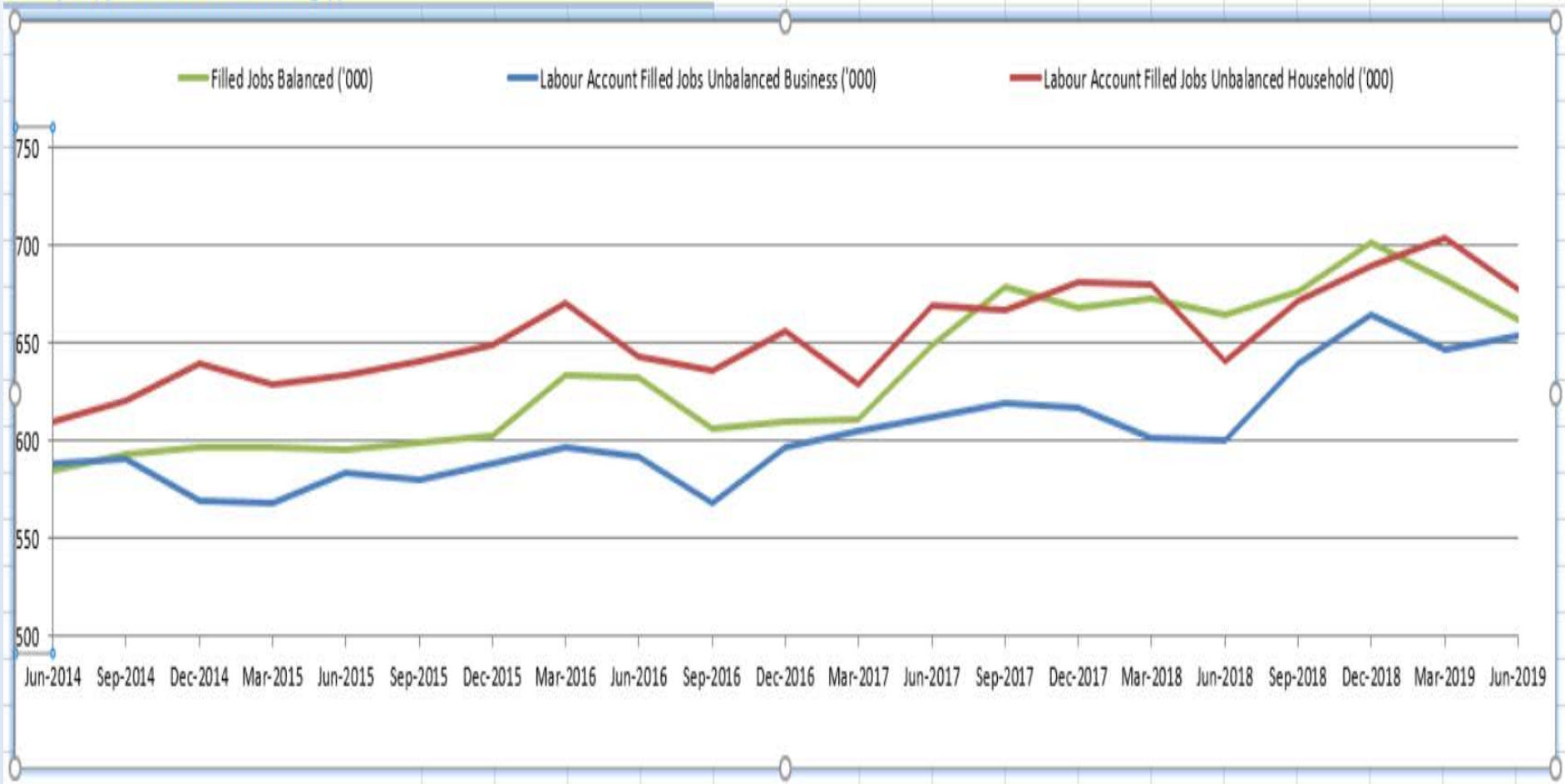
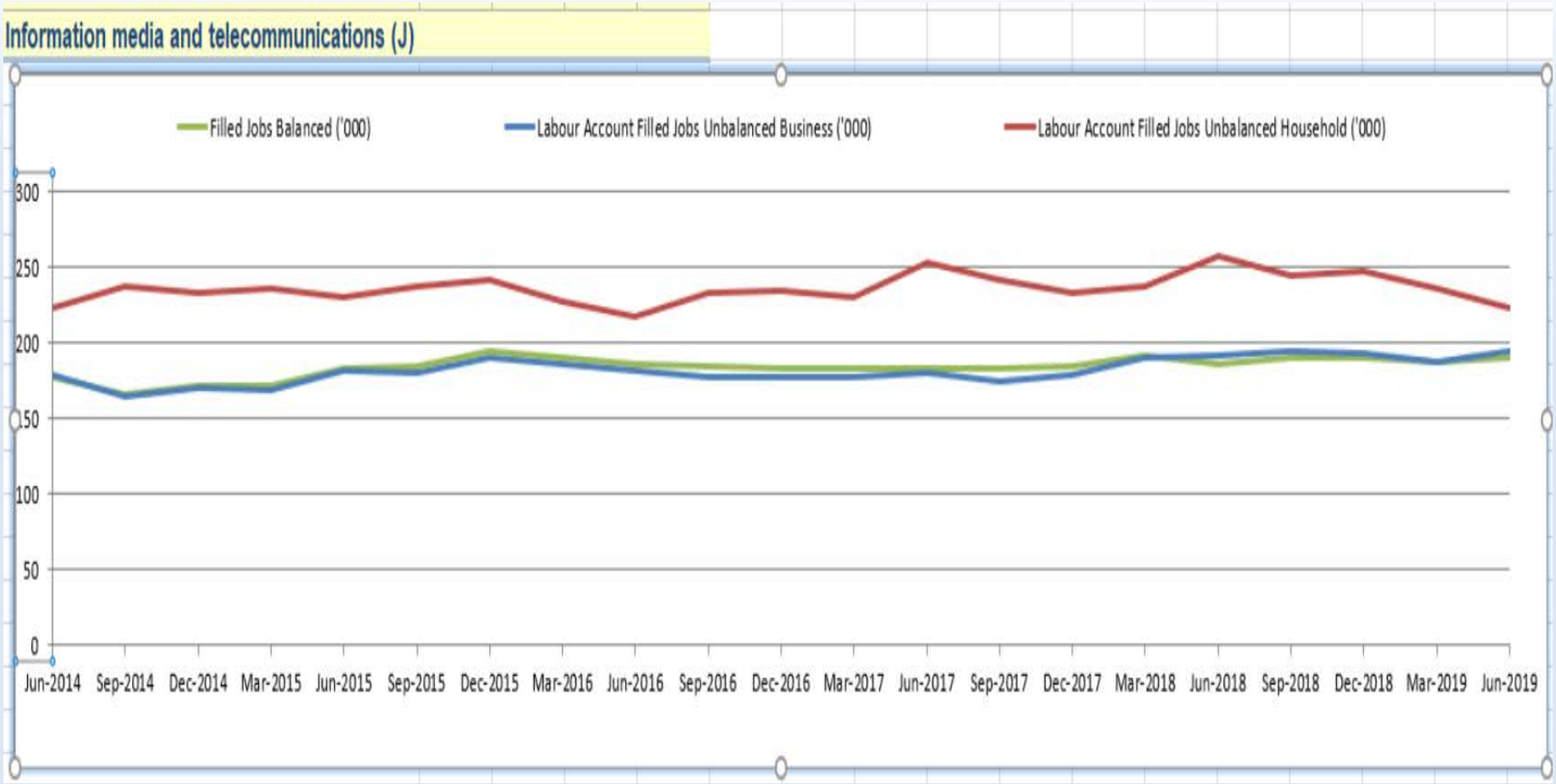
Accommodation and food services (H)



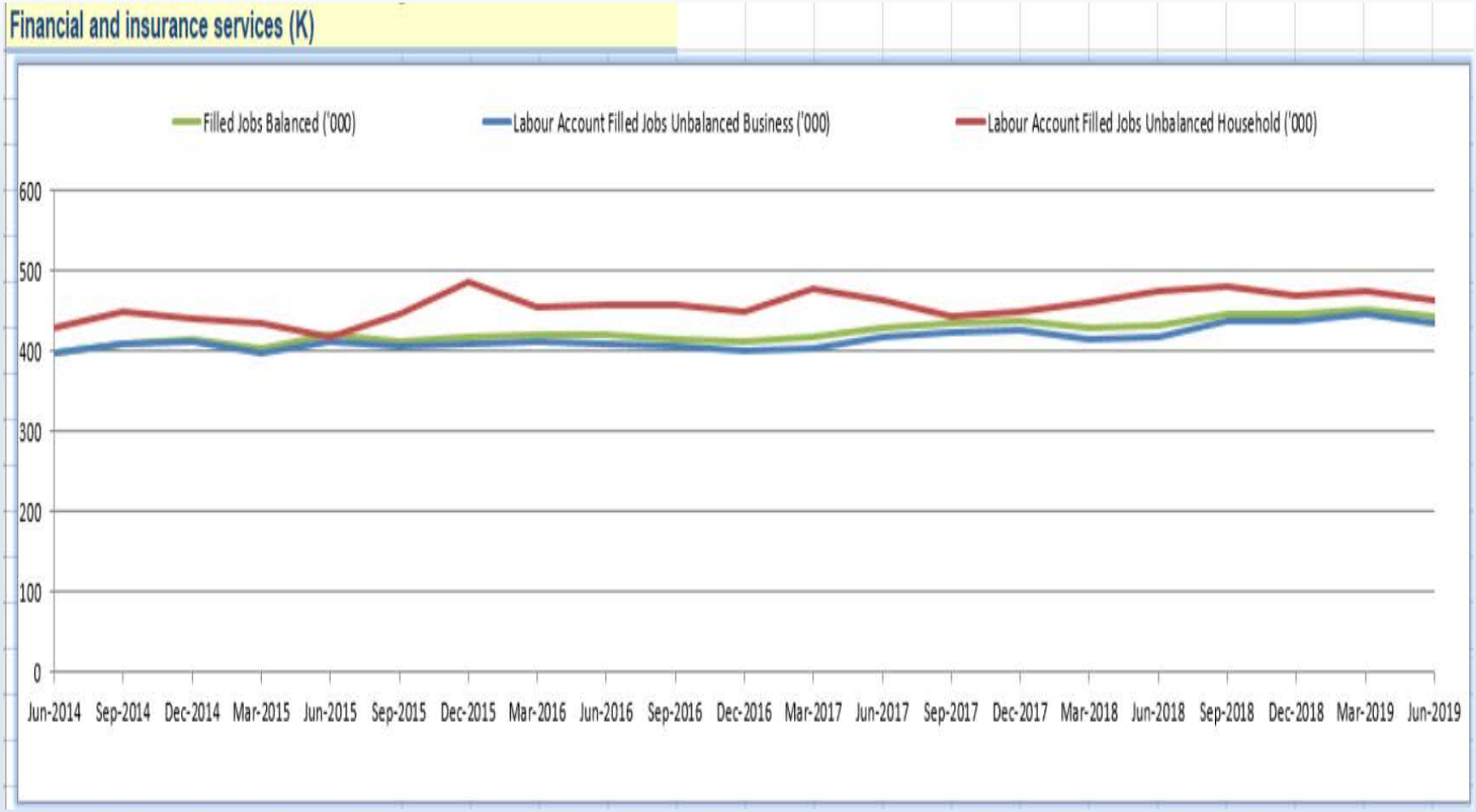
Transport, postal and warehousing (I)



Information media and telecommunications (J)



Financial and insurance services (K)



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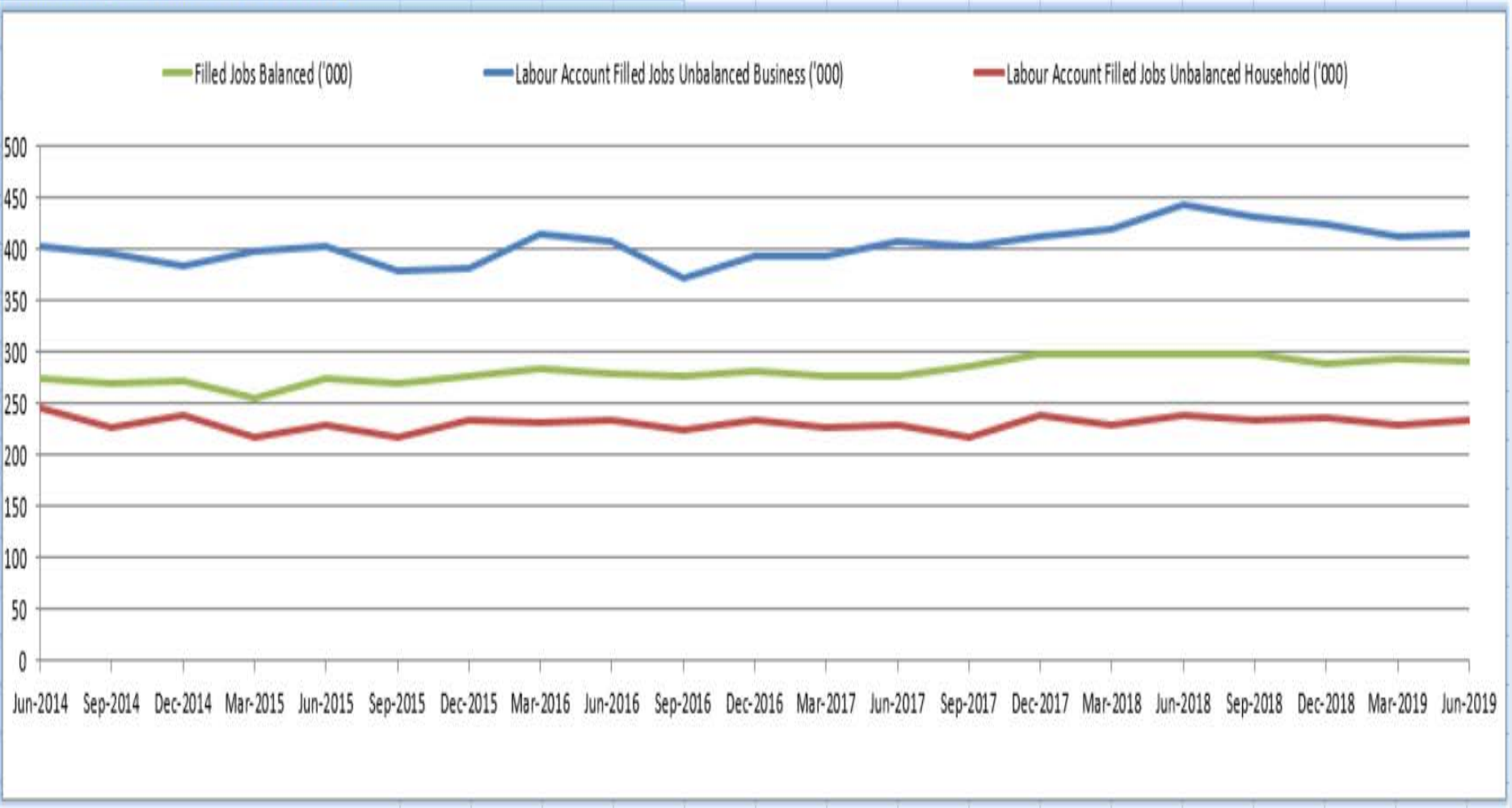
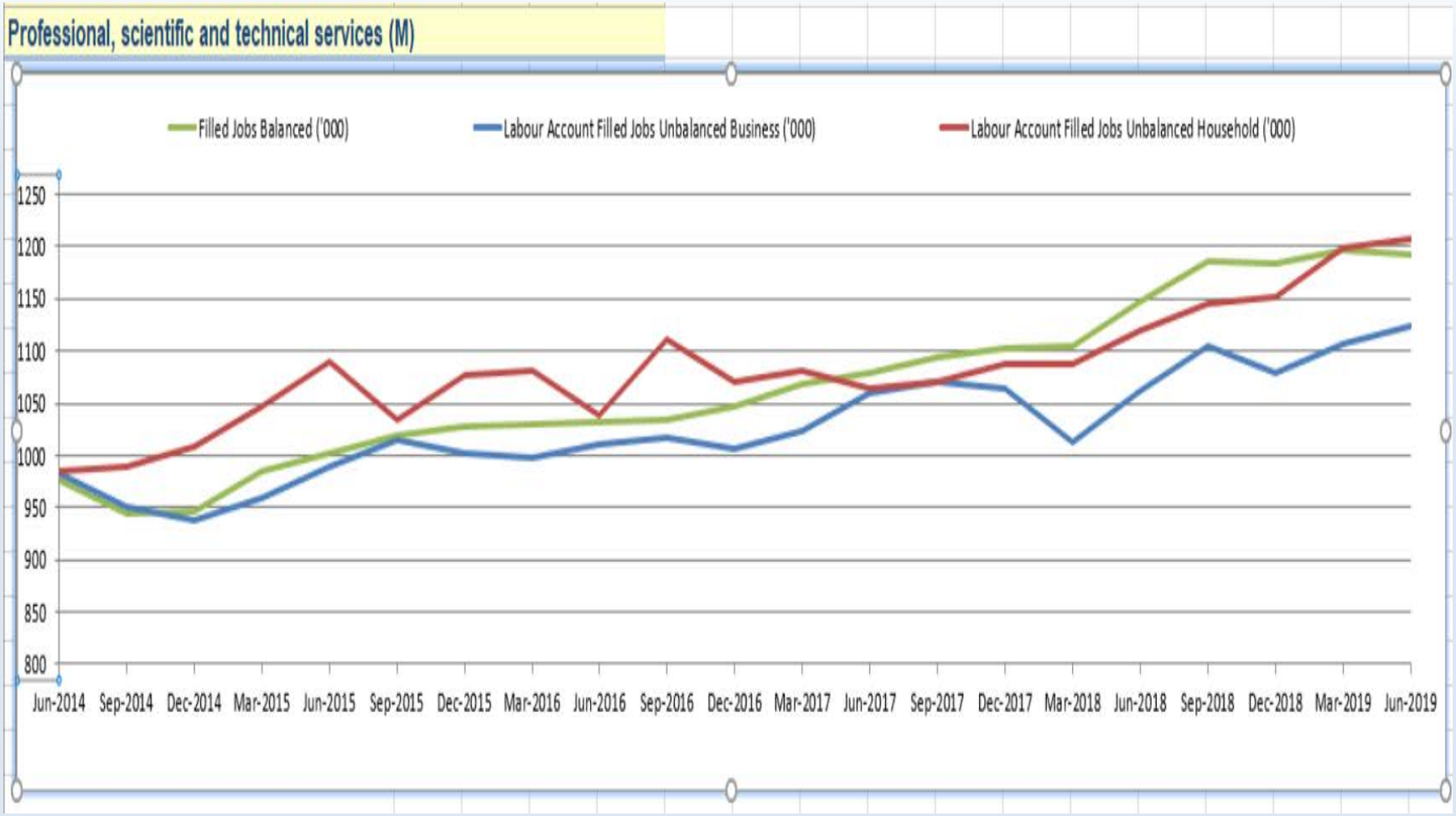
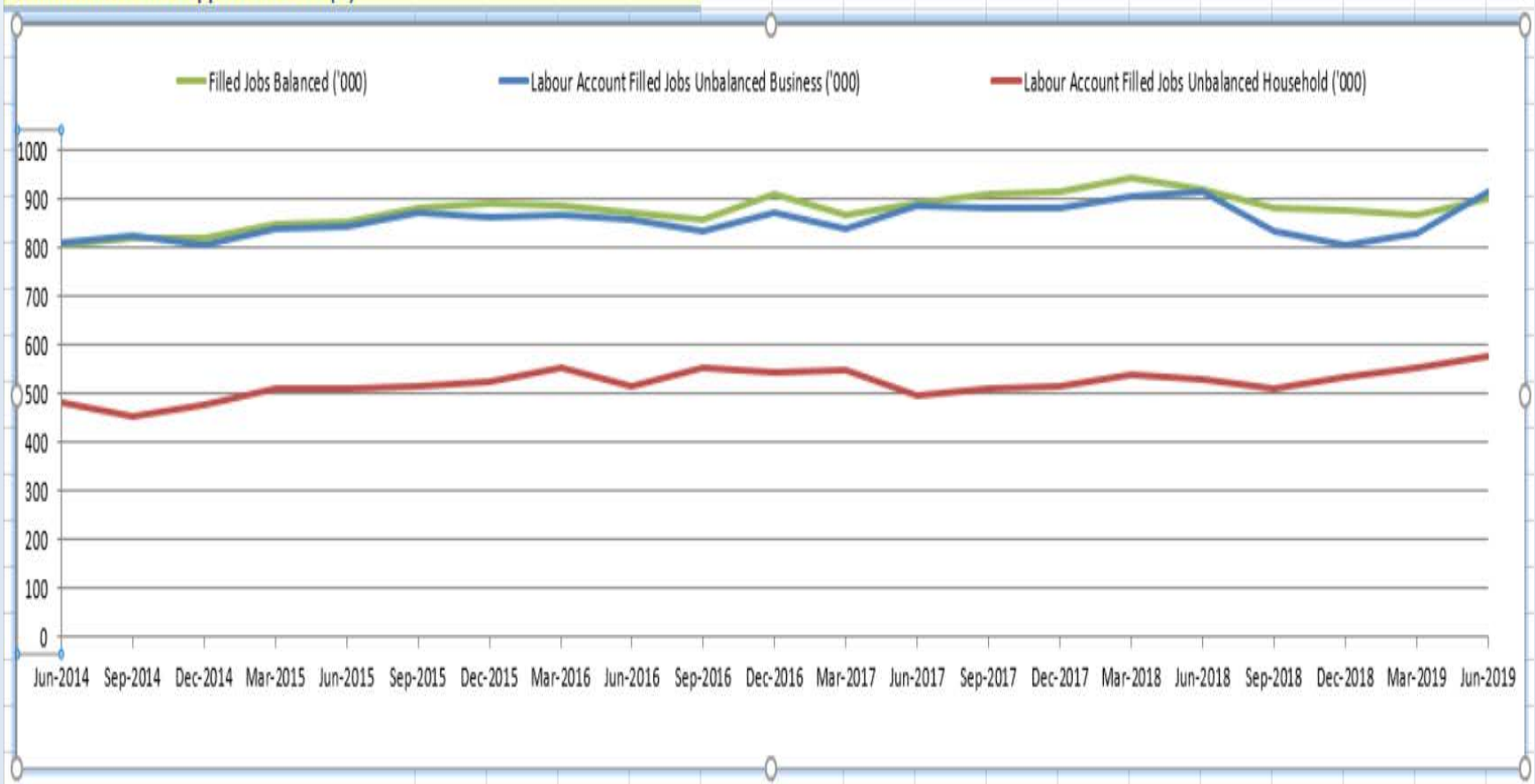
Rental, hiring and real estate services (L)



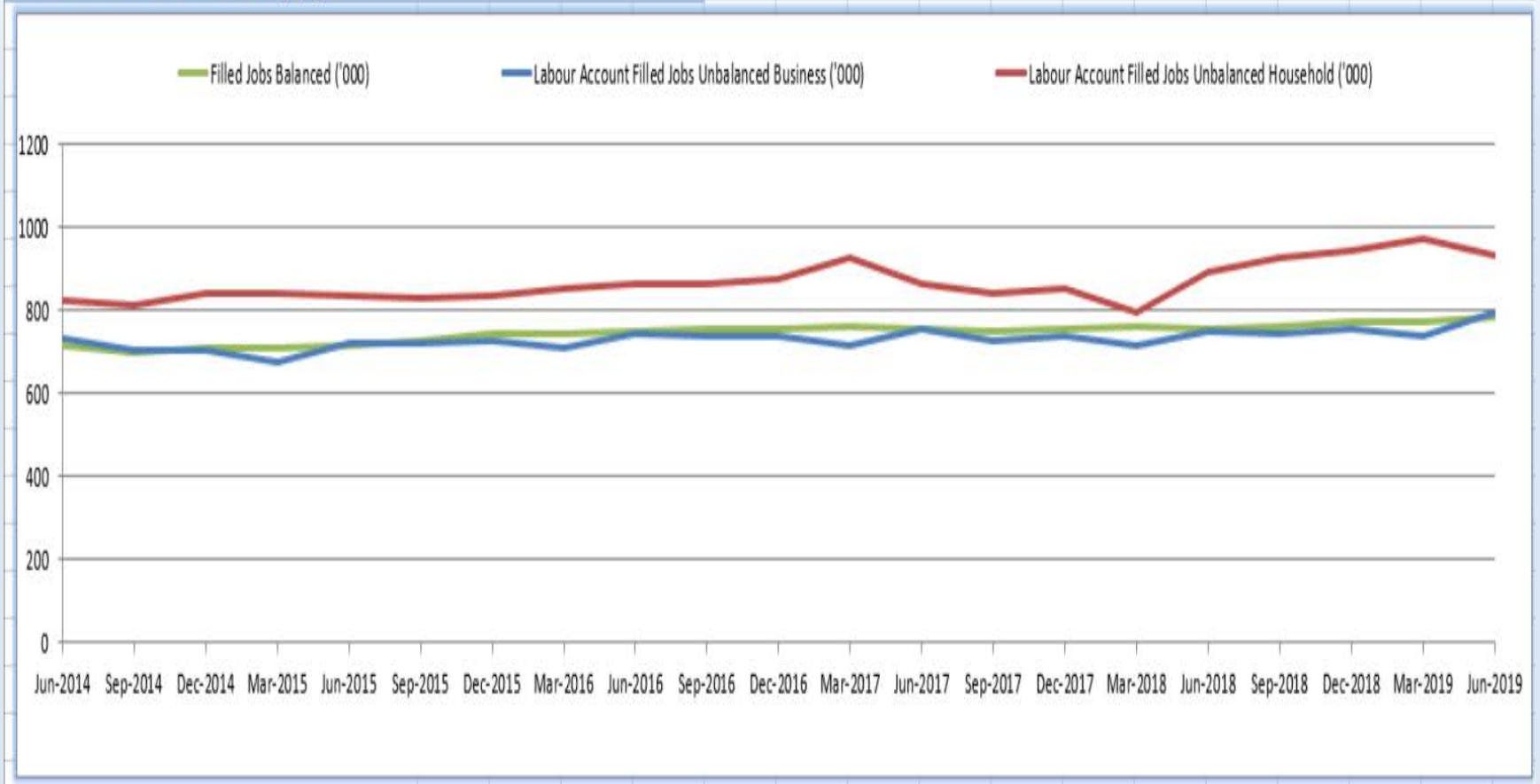
Professional, scientific and technical services (M)



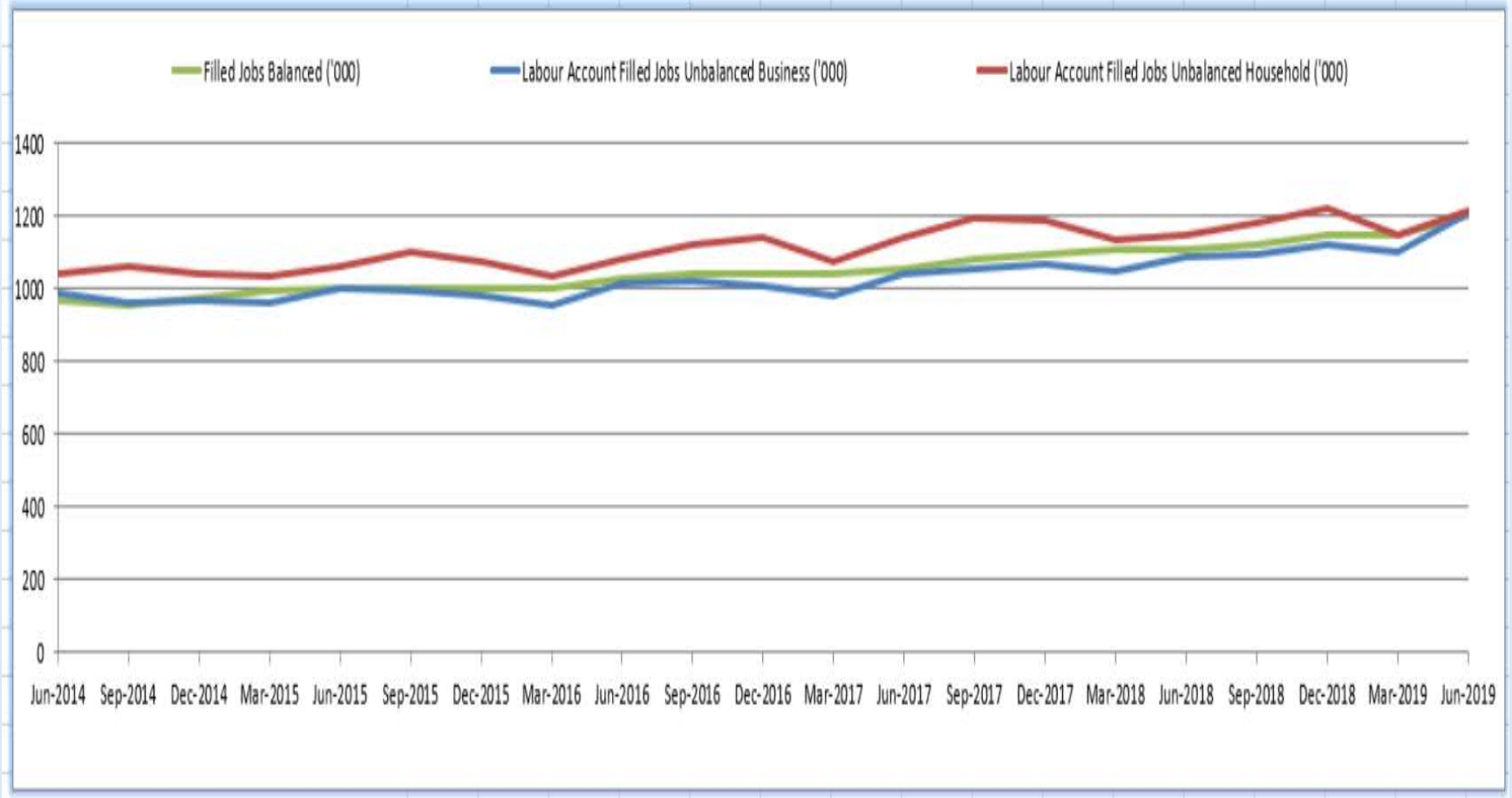
Administrative and support services (N)



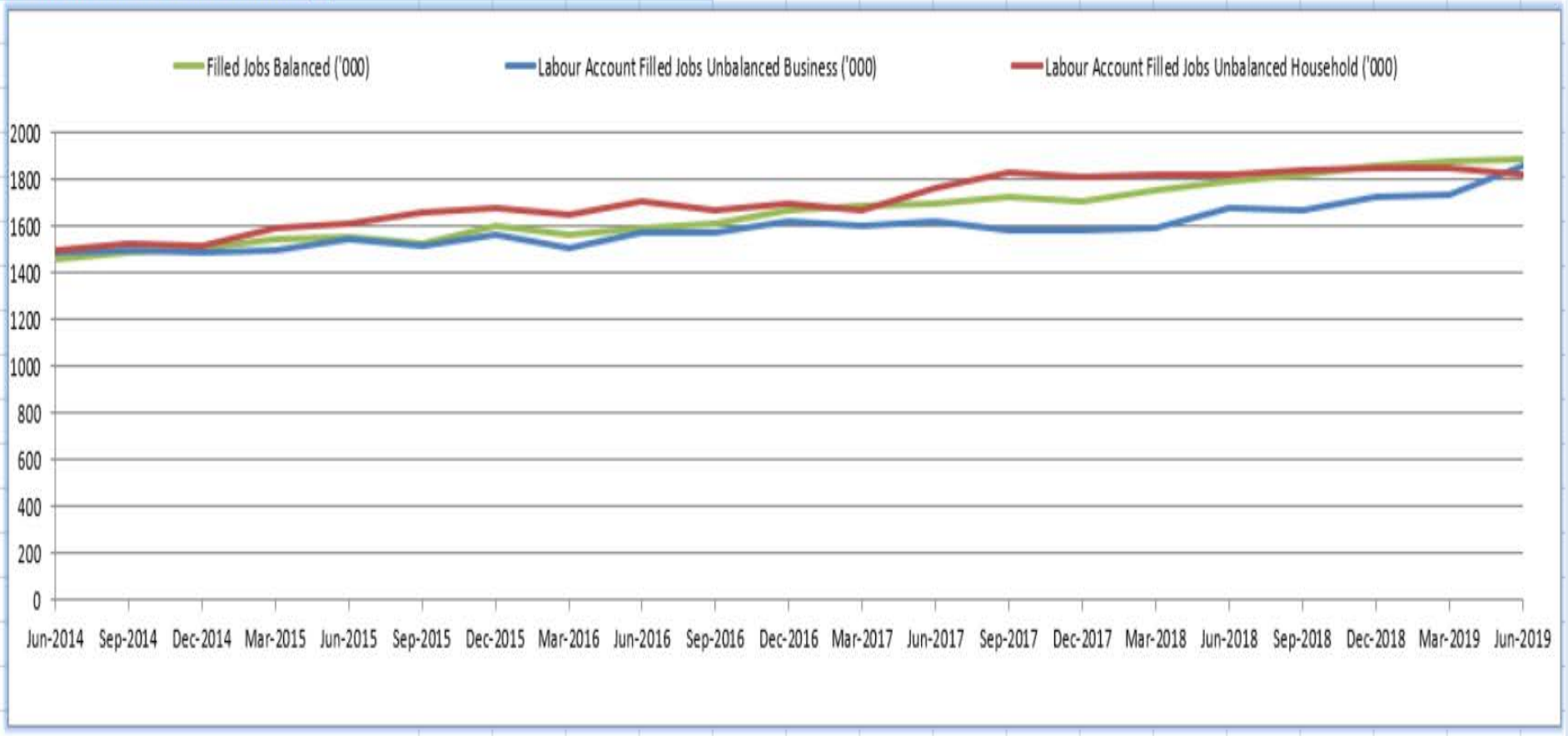
Public administration and safety (O)



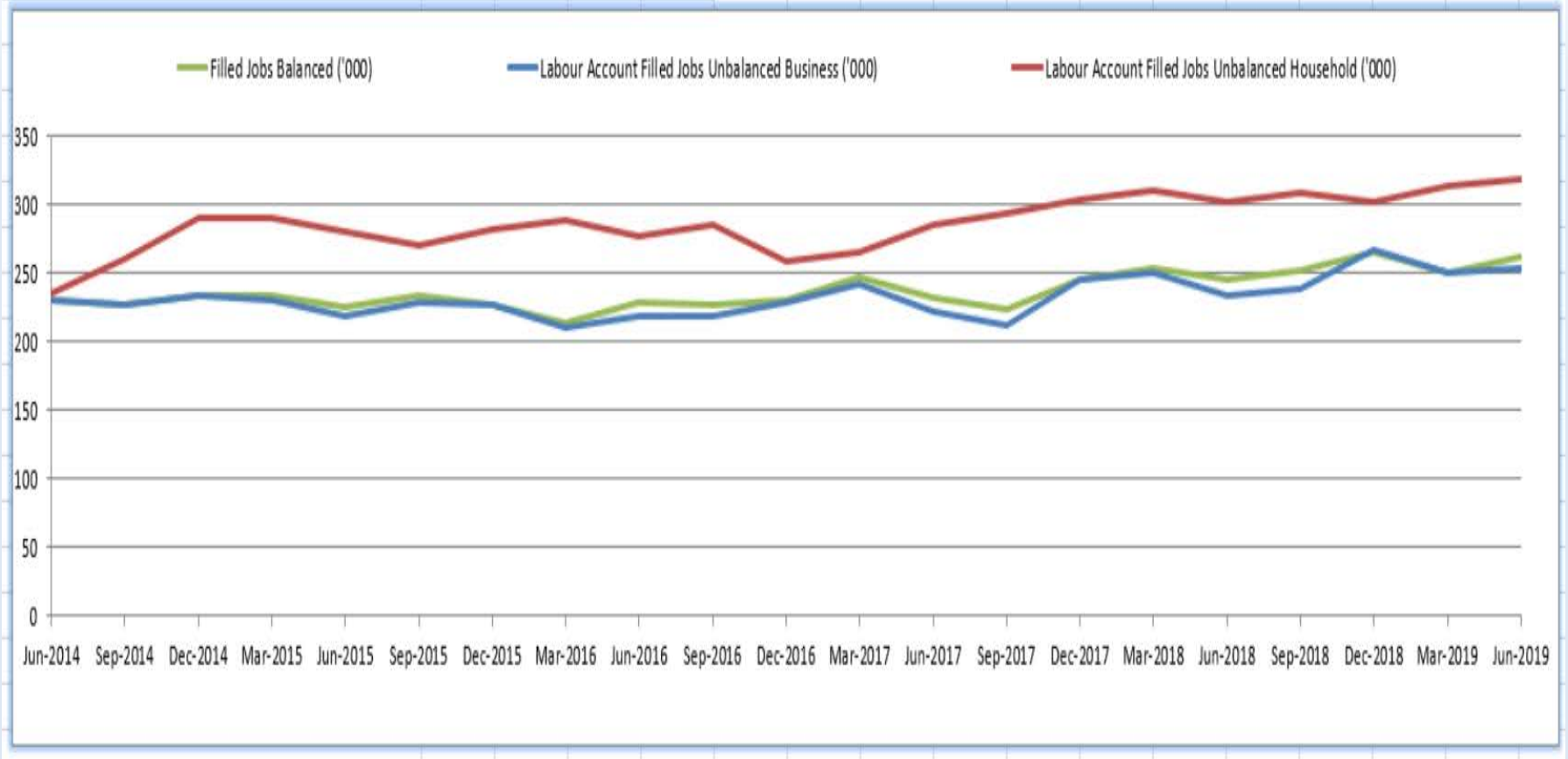
Education and training (P)



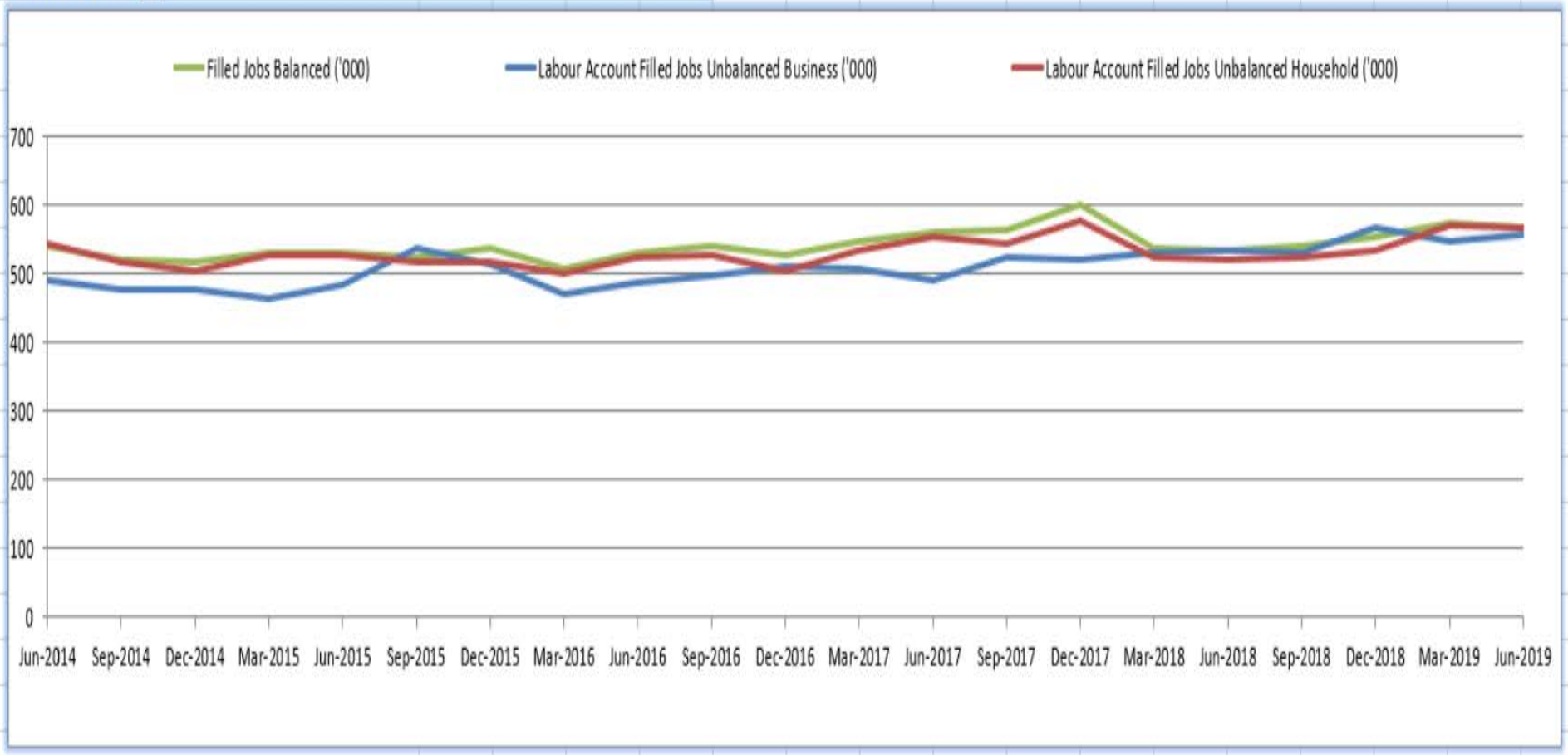
Health care and social assistance (Q)



Arts and recreation services (R)



Other services (S)



THANK
YOU