John Ward Economics

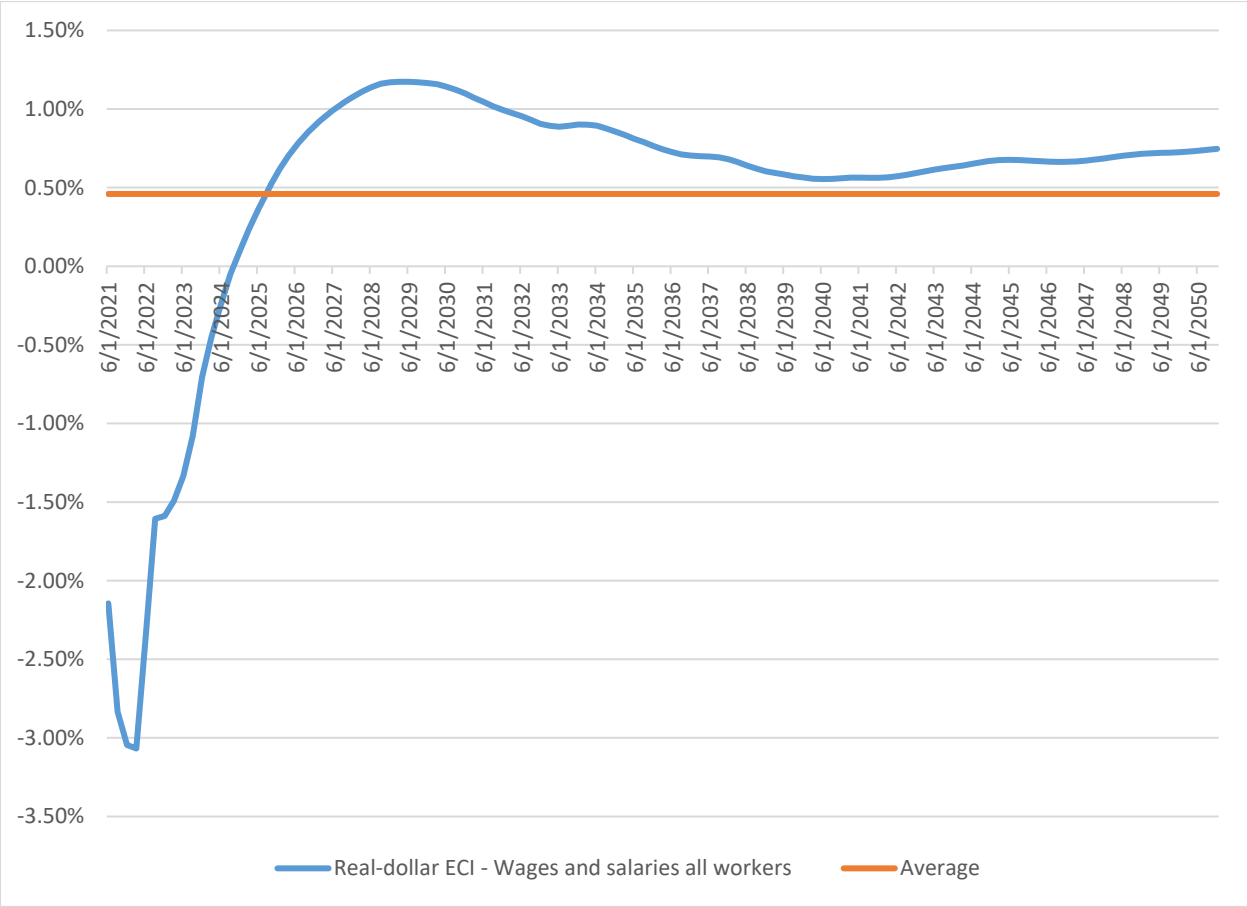


Incremental Growth Analysis: June 2020

Cyclical Macro-Economic Forecasts

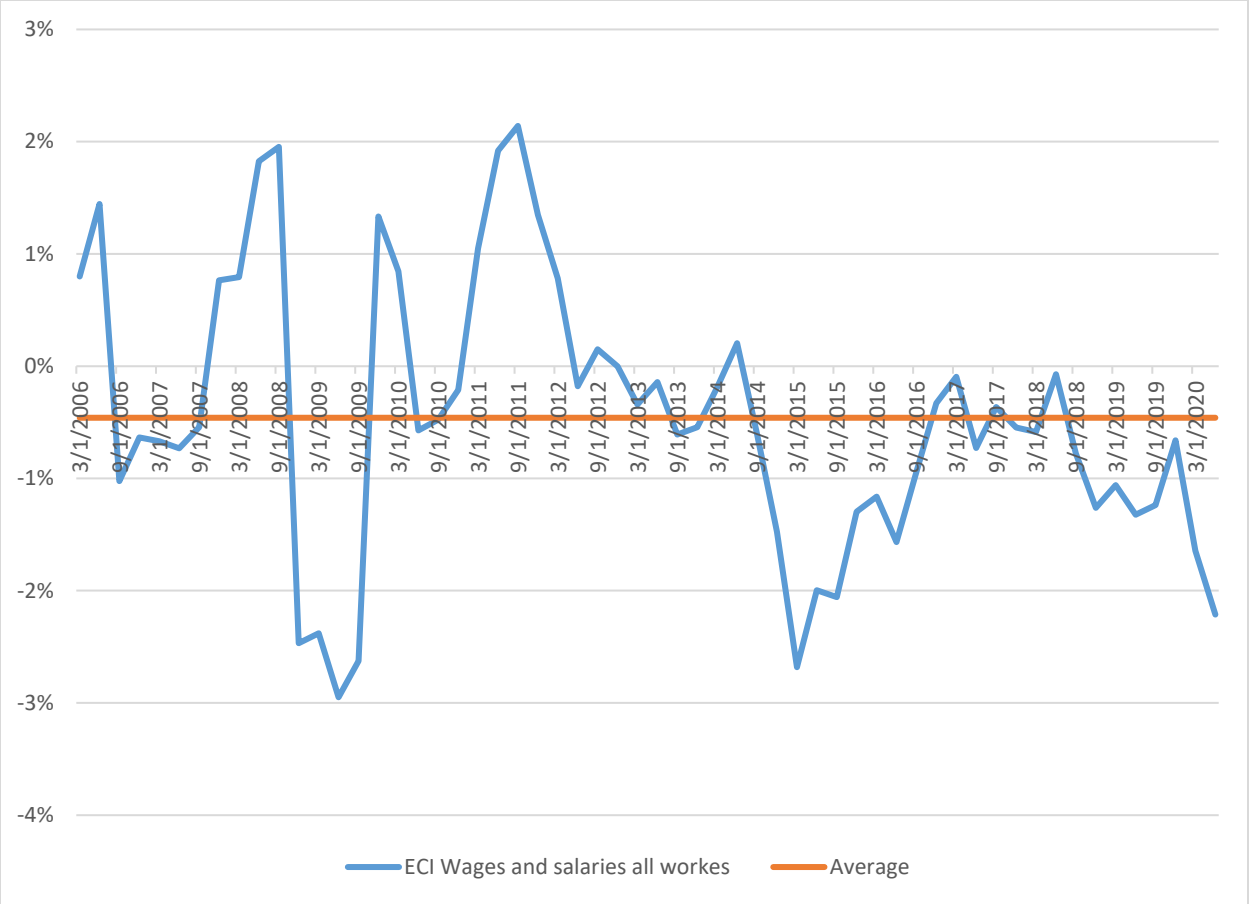
To build growth forecasts of labor earnings and service and commodity costs, John Ward Economics relies on the macroeconomic forecasting model of Moody's Analytics. The Moody's Analytics U.S. macro model is a large-scale, simultaneous-equilibrium model that allows for interrelationships among all of the sectors of the U.S. economy. A description of the forecast model which produces the forecasts used can be found at Moody's Analytics' Internet site.[1]

Economists' forecasting methods consider both short-term on long-term expectations. Recent trends in economic time series provide short-term expectations and structural linkages within the economy govern long-term expectations. The best economic forecast considers both short and long-term expectations. For example, consider the Moody's forecast of the real-dollar Employment Cost Index (ECI) for the total wages and salaries paid by employers to all workers:



On an annual basis, the Moody's forecasting model predicts negative wage growth through 2024 followed by a cyclical upturn and then steady deceleration to a long term growth level,

[1] http://www.economy.com/home/products/samples/macromodel.pdf



Incremental Growth Analysis

Moody's provides forecasts for the ECI wage and salary, benefits, and total compensation for all workers, manufacturing, goods-producing industries, service-producing industries, and state and local governments. In addition, they provide numerous forecasts of the Consumer Price Index detailed series. For economic variables that a macro-economic forecast is not published, we perform a past incremental analysis between those variables and variables for which forecast values are published.

The title of the table gives (1) the name of the economic variable for which a forecast value is not published, and (2) the name of a related economic variable which has a published Moody's forecast.

The **LABSTAT series identifiers** refer to the Bureau of Labor Statistics data series identifiers. The data for the economic variables can be extracted from the LABSTAT database at the Internet location http://data.bls.gov/cgi-bin/srgate.

The **historical data period** gives the range of dates considered for the incremental growth analysis.

Assume that the wages/prices of the unpublished forecast variable at time t is be represented by W_t° and that corresponding published forecast variable has a value at time t is represented as $W_t^{\blacksquare}$. We define the period-to-period ratio in the wages/prices in the unpublished forecast series ° to that of the published forecasted series as

(1) $R_t^{\circ} = \frac{W_t^{\circ}}{W_t^{\blacksquare}}$

and the period growth differential in R°as

(2) $G_t^{\circ} = \frac{R_t^{\circ} - R_{t-1}^{\circ}}{R_{t-1}^{\circ}}$.

If the growth differential series G° is stationary there is a constant mechanism separating the wage/price growth in the unpublished forecast variable ° from that of the published forecasted variable. A covariance stationary series has a time invariant mean and variance such that the series fluctuates around a constant long-term mean. The unbiased forecast of a stationary series is its long-term mean.

An accepted test for determining the stationarity of a growth series is the Phillips-Perron test. The Phillips-Perron test is an augmented Dickey-Fuller test that recognizes autocorrelation and heteroscedasticity in the disturbance. The Phillips-Perron test for a single mean, μ, in G° is determined from the autoregressive model

(3) $G_t^{\circ} = \mu + \rho G_{t-1}^{\circ} + u_t$

where ρ is the coefficient on the lagged growth differential value, and u_t is the disturbance. Since first order autocorrelation is expected in G°, to get an unbiased estimate of the single mean growth μ, the disturbance adds a first order autocorrelation parameter to that where u_t is specified as

(4) $u_t = \varepsilon_t - \varphi_1 u_{t-1}$ and $\varepsilon_t N(0, \sigma^2)$.

The autoregressive model is estimated using the Yule-Walker method which first estimates the mean growth μ with generalized least squares, then φ_1 with ordinary least squares, and then using φ_1 the mean μ is re-estimated with generalized least squares. The generalized least squares approach corrects for the heteroscedasticity in the variance of the time series observations.

Output and Interpretation

The *Z* values are the Phillips-Perron single mean stationarity statistics as presented in the Phillips-Perron paper: Phillips, Peter CB, and Pierre Perron. "Testing for a unit root in time series regression." *Biometrika* 75.2 (1988): 335-346. While the value of the Z-statistics have no important meaning, if the Prob(Z) is less than 0.05, we reject the null hypothesis that the growth series contains a unit root (i.e., it is non-stationary).

The value for the intercept *mu* is shown under the Yule-Walker parameter estimate section. Since the intercept is an estimated of incremental quarterly growth, it is compounded by four to an annual incremental growth rate. If the probability of the *t*-statistic is less than .05, we reject that the incremental growth rate is zero.

The AR(1) coefficient is the estimated measure of the period-to-period dependency in the estimated model residuals. With AR(1) correction, we attempt to remove that dependency. If the Durbin–Watson statistic is substantially less than 2, there is evidence of positive serial correlation and if substantially greater than 2 then successive error terms are negatively correlated. If the Durbin-Watson statistic is approximately equal to 2, then we can be confident that the model removed serial correlation.

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0106	AR(1) coefficient	0.2206
Standard error	0.0184	Standard error	0.1292
t-statistic	0.5778	t-statistic	1.7073
Probability t	0.5657	Durbin-Watson	2.0397

Estimated incremental annual growth rate: 0.042%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

The value for the intercept *mu* (u_t) is shown under the Yule-Walker parameter estimate section. Since the intercept is an estimated of incremental quarterly growth, it is compounded by four to an annual incremental growth rate $[(1+mu)^4 - 1]$. If the probability of the *t*-statistic is less than .05, we reject that the incremental growth rate is zero.

The AR(1) coefficient (*psi* or ψ) is the estimated measure of the period-to-period dependency in the estimated model residuals. With AR(1) correction, we attempt to remove that dependency. If the Durbin–Watson statistic is substantially less than 2, there is evidence of positive serial correlation and if substantially greater than 2 then successive error terms are negatively correlated. If the Durbin-Watson statistic is approximately equal to 2, then we can be confident that the model removed serial correlation.

Table 1. ECI: COMP(PRIV) Management, professional, and related incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100001000001 and CIS20100000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.2915	Z_{Tau}	-3.3711
Prob Z_{Rho}	0.0076	Prob Z_{Tau}	0.0166

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0337	AR(1) coefficient	-0.6314
Standard error	0.0214	Standard error	0.1119
t-statistic	-1.5773	t-statistic	-5.6409
Probability t	0.1213	Durbin-Watson	1.6847

Estimated incremental annual growth rate: (0.135%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

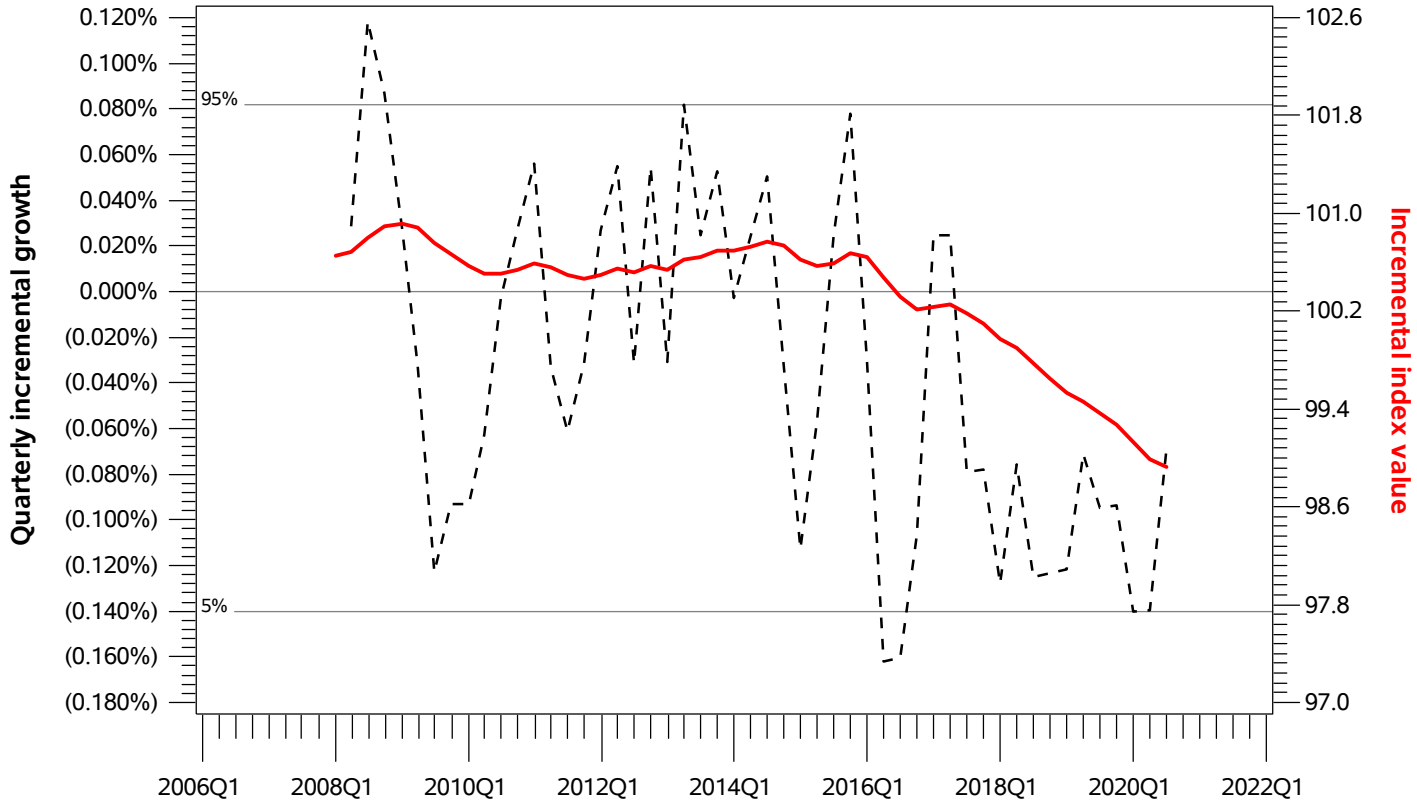


Table 2. ECI: COMP(PRIV) Management, business, and financial incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100001100001 and CIS20100000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-26.7416	Z_{Tau}	-4.0465
Prob Z_{Rho}	0.0007	Prob Z_{Tau}	0.0025

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0034	AR(1) coefficient	-0.5168
Standard error	0.0277	Standard error	0.1236
t-statistic	-0.1220	t-statistic	-4.1827
Probability t	0.9034	Durbin-Watson	1.5753

Estimated incremental annual growth rate: (0.014%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

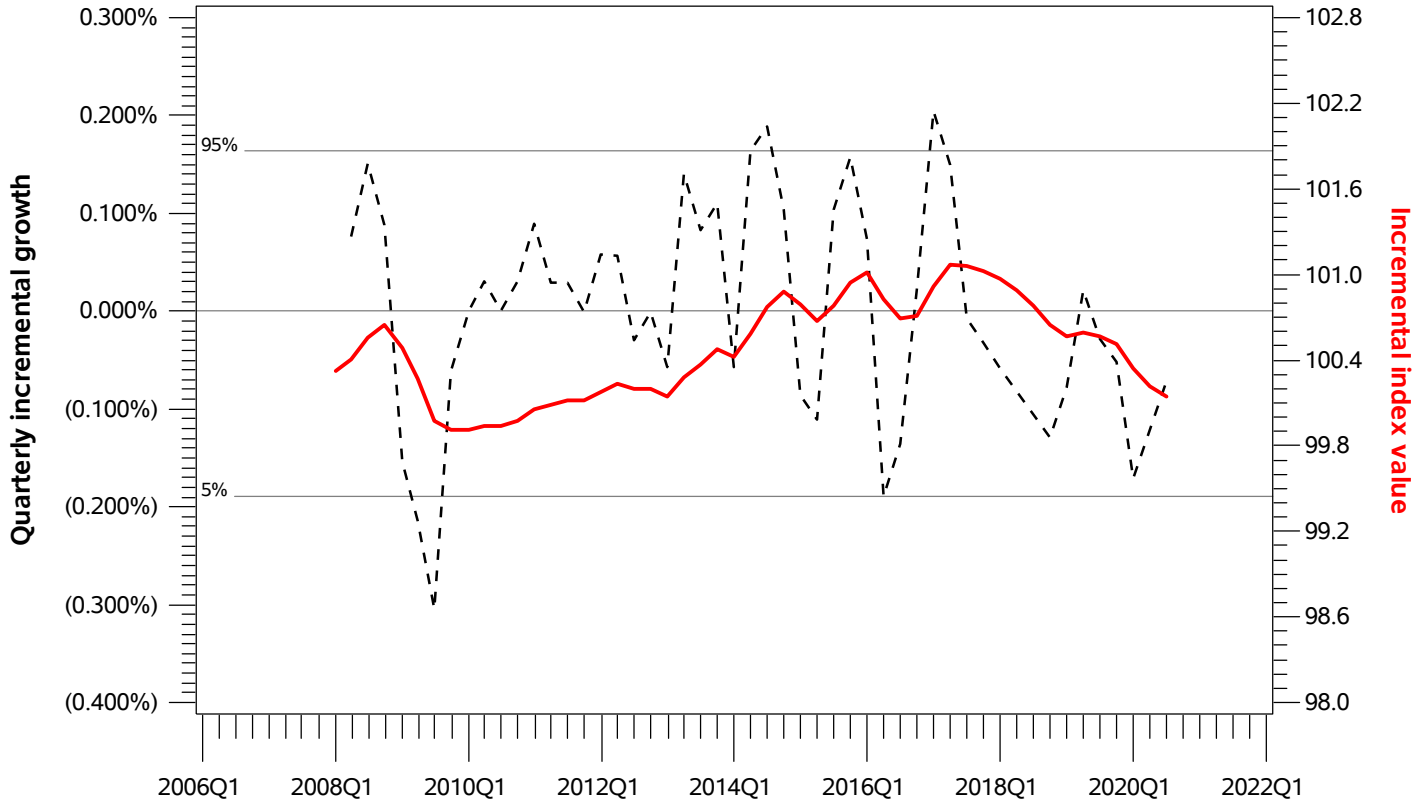


Table 3. ECI: COMP(PRIV) Professional and related incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100001200001 and CIS20100000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-16.4302	Z_{Tau}	-3.0803
Prob Z_{Rho}	0.0184	Prob Z_{Tau}	0.0343

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0559	AR(1) coefficient	-0.6751
Standard error	0.0278	Standard error	0.1065
t-statistic	-2.0128	t-statistic	-6.3394
Probability t	0.0498	Durbin-Watson	1.8597

Estimated incremental annual growth rate: (0.223%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (0.223%)

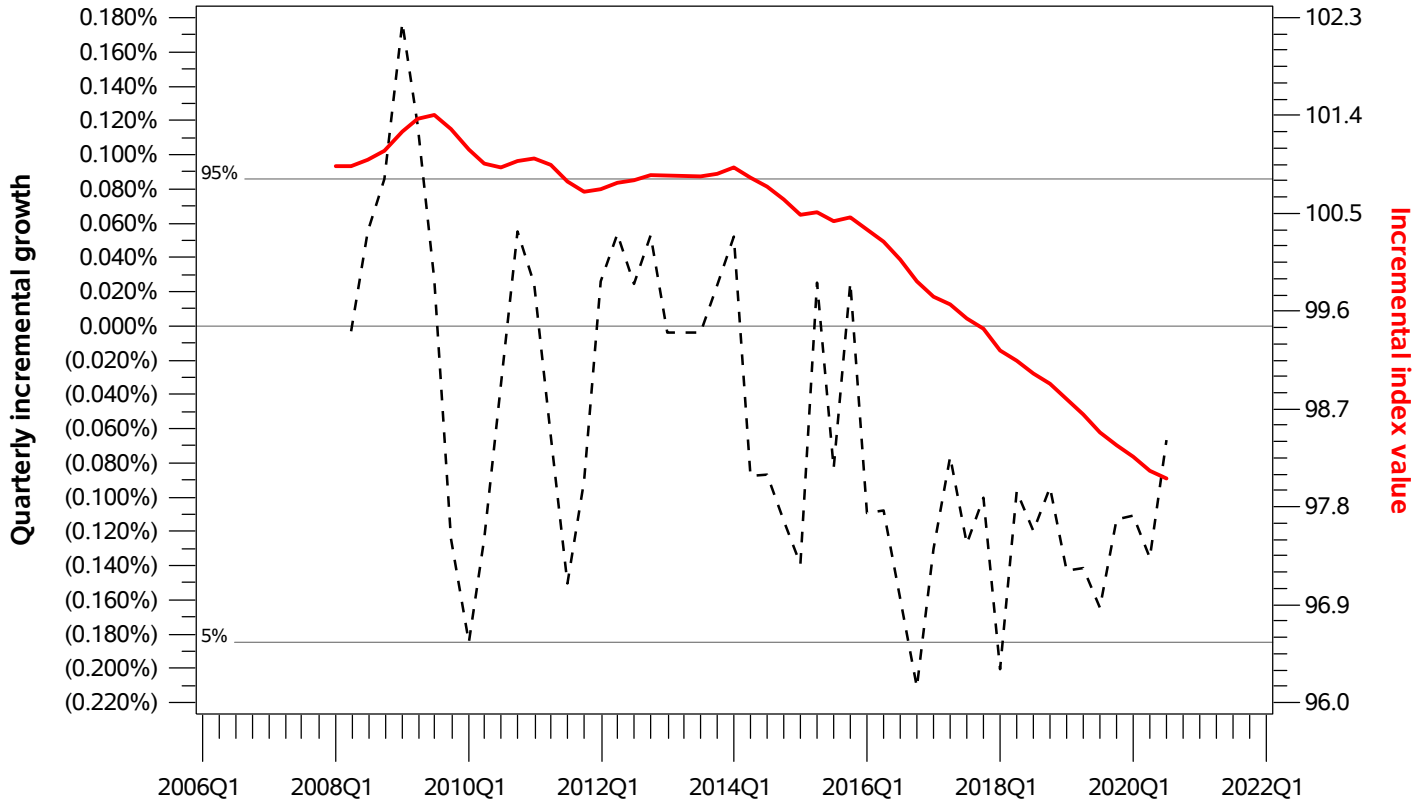


Table 4. ECI: COMP(PRIV) Sales and office incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100002000001 and CIS20100000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.3943	Z_{Tau}	-3.4980
Prob Z_{Rho}	0.0054	Prob Z_{Tau}	0.0118

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0255	AR(1) coefficient	-0.6052
Standard error	0.0274	Standard error	0.1149
t-statistic	0.9297	t-statistic	-5.2673
Probability t	0.3572	Durbin-Watson	1.6990

Estimated incremental annual growth rate: 0.102%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

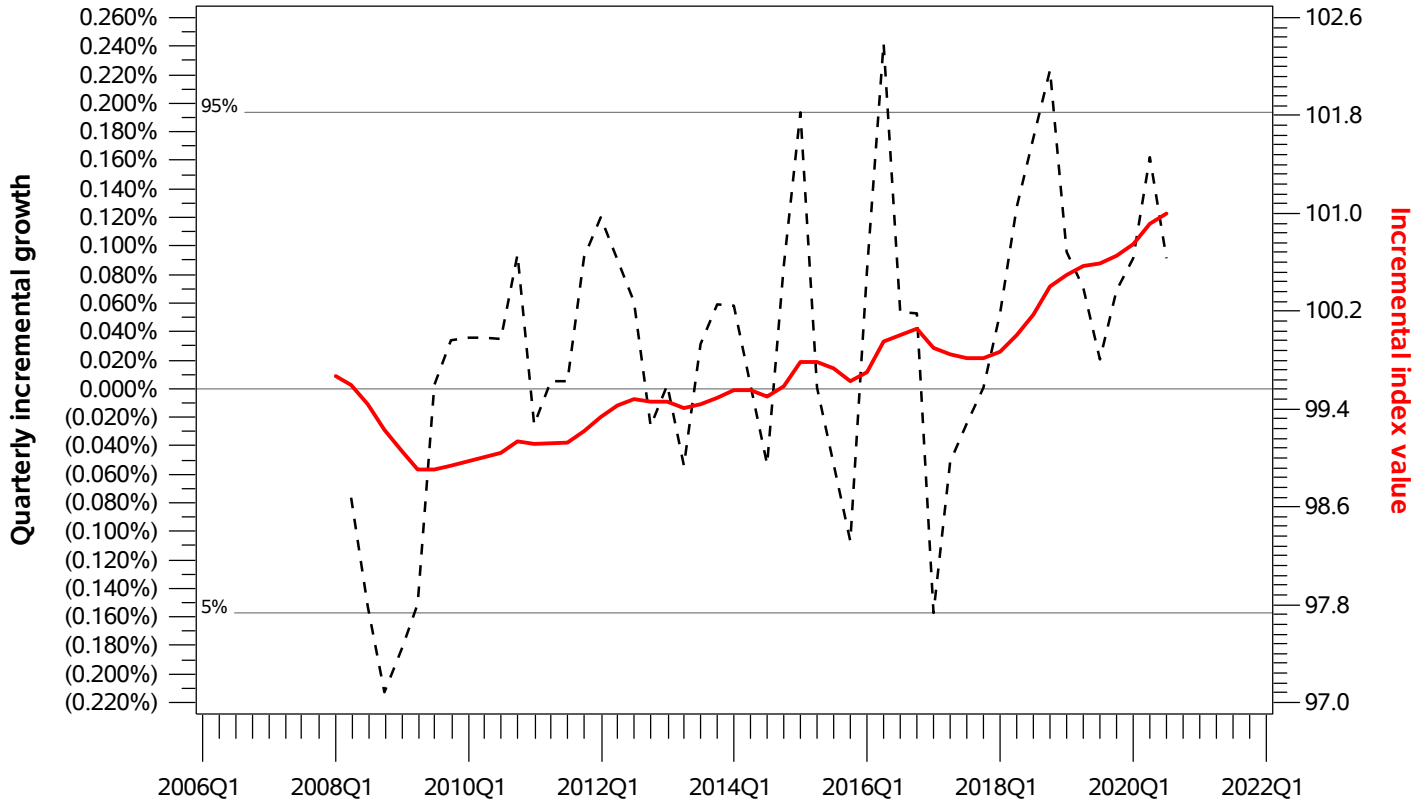


Table 5. ECI: COMP(PRIV) Sales and related incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100002100001 and CIS20100000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.8092	Z_{Tau}	-3.3533
Prob Z_{Rho}	0.0065	Prob Z_{Tau}	0.0173

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0009	AR(1) coefficient	-0.6263
Standard error	0.0836	Standard error	0.1125
t-statistic	-0.0104	t-statistic	-5.5657
Probability t	0.9918	Durbin-Watson	1.6783

Estimated incremental annual growth rate: (0.003%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

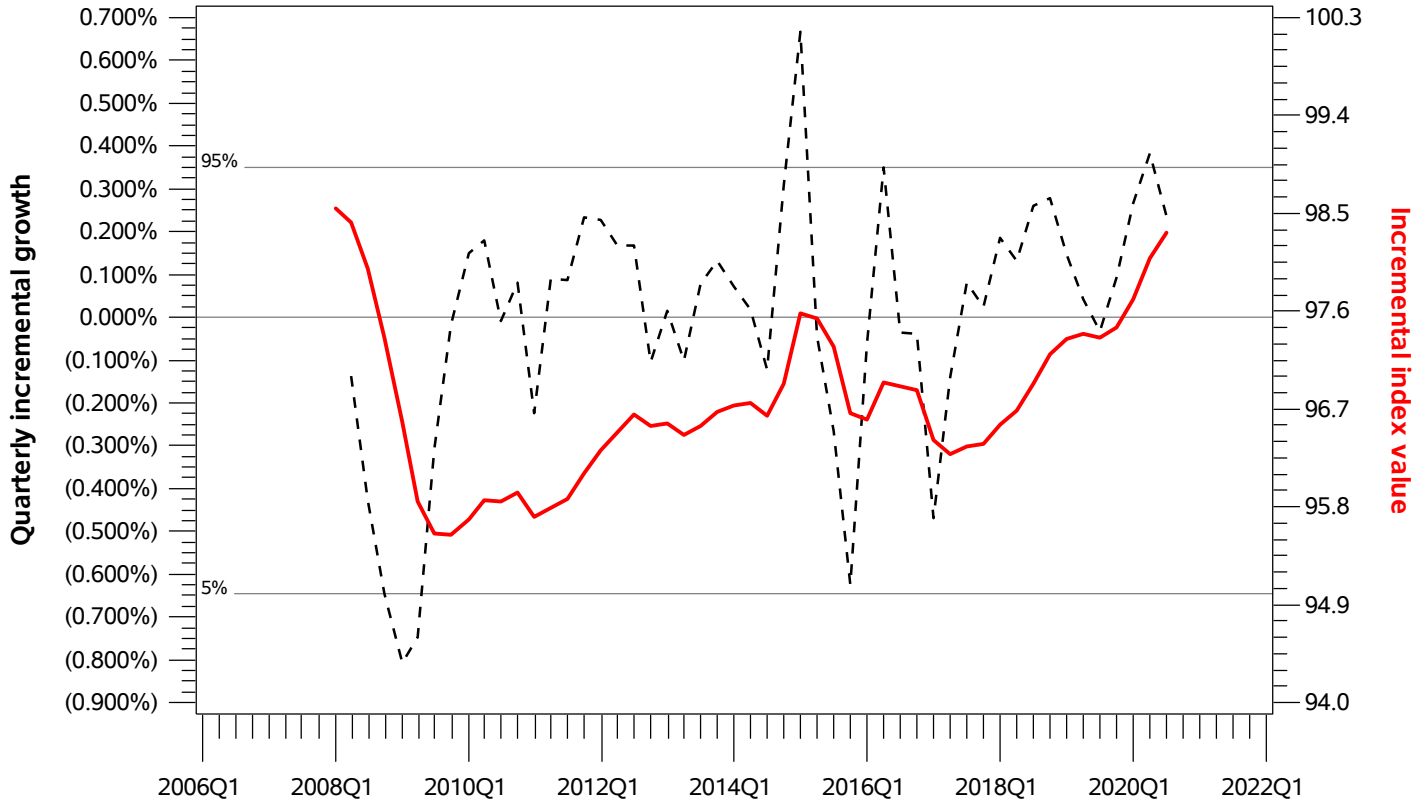


Table 6. ECI: COMP(PRIV) Office and administrative support incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100002200001 and CIS20100000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.2917	Z_{Tau}	-3.5023
Prob Z_{Rho}	0.0055	Prob Z_{Tau}	0.0117

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0432	AR(1) coefficient	-0.5693
Standard error	0.0234	Standard error	0.1187
t-statistic	1.8446	t-statistic	-4.7972
Probability t	0.0713	Durbin-Watson	2.0247

Estimated incremental annual growth rate: 0.173%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.173%

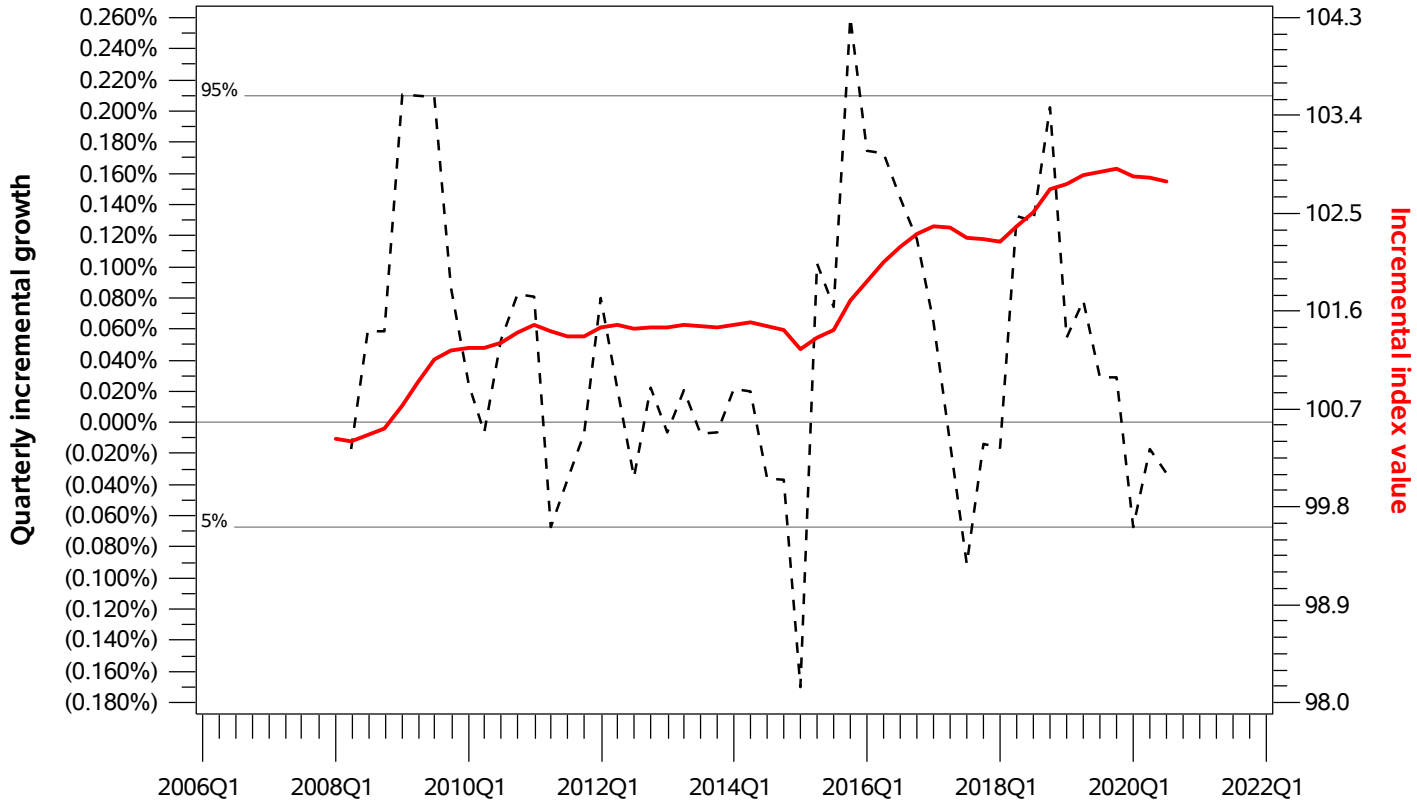


Table 7. ECI: COMP(PRIV) Service occupations incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100003000001 and CIS20100000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-10.1474	Z_{Tau}	-2.3383
Prob Z_{Rho}	0.1110	Prob Z_{Tau}	0.1642

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0303	AR(1) coefficient	-0.7823
Standard error	0.0600	Standard error	0.0899
t-statistic	0.5052	t-statistic	-8.7000
Probability t	0.6157	Durbin-Watson	2.0477

Estimated incremental annual growth rate: 0.121%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

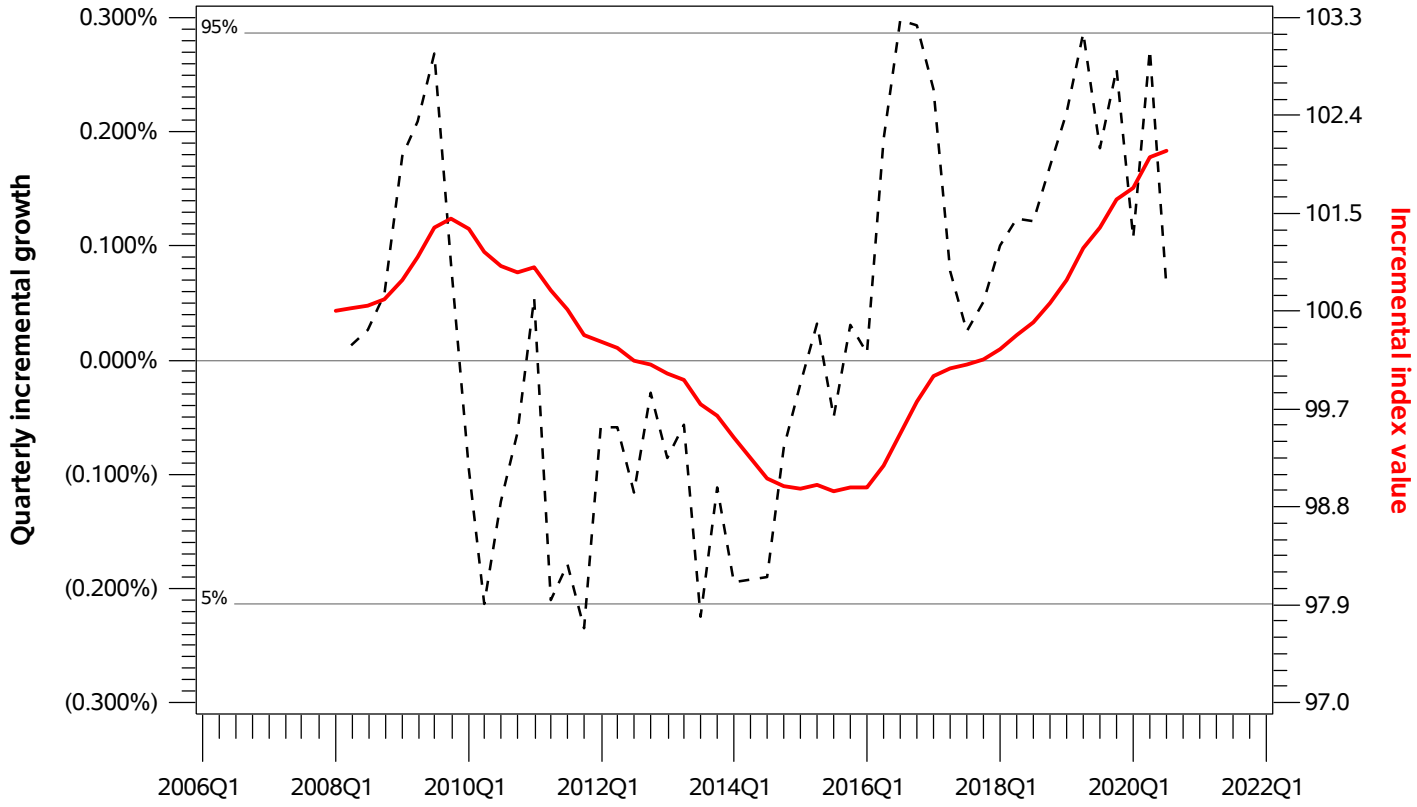


Table 8. ECI: COMP(PRIV) Natural resources, construction, and maintenance incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100004000001 and CIS20100000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-27.1905	Z_{Tau}	-4.3461
Prob Z_{Rho}	0.0006	Prob Z_{Tau}	0.0010

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0083	AR(1) coefficient	-0.4126
Standard error	0.0169	Standard error	0.1315
t-statistic	-0.4920	t-statistic	-3.1379
Probability t	0.6250	Durbin-Watson	2.1283

Estimated incremental annual growth rate: (0.033%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

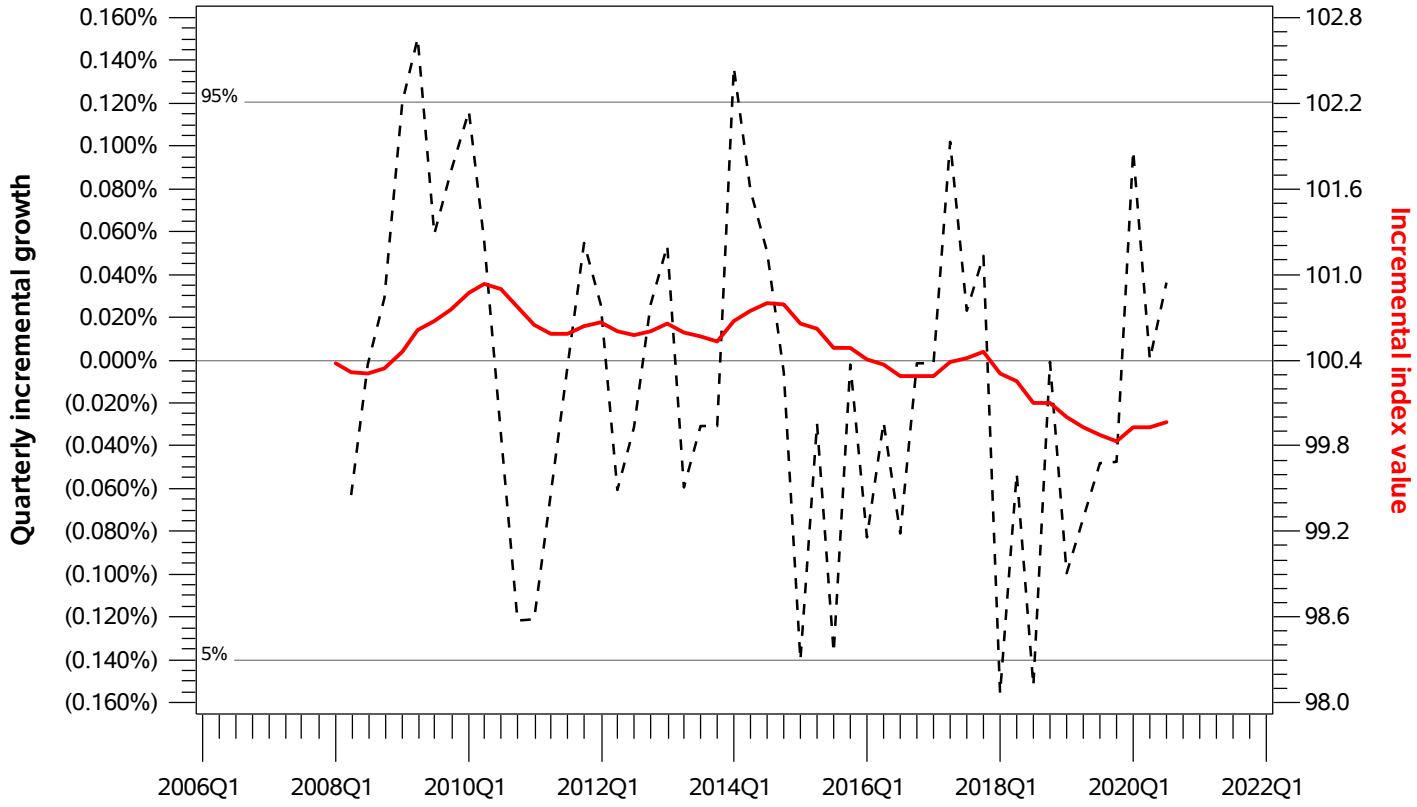


Table 9. ECI: COMP(PRIV) Construction, extraction, farming, fishing, and forestry occupations incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100004050001 and CIS20100000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.9083	Z_{Tau}	-4.0141
Prob Z_{Rho}	0.0024	Prob Z_{Tau}	0.0027

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0167	AR(1) coefficient	-0.4686
Standard error	0.0260	Standard error	0.1275
t-statistic	-0.6429	t-statistic	-3.6749
Probability t	0.5234	Durbin-Watson	2.2284

Estimated incremental annual growth rate: (0.067%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

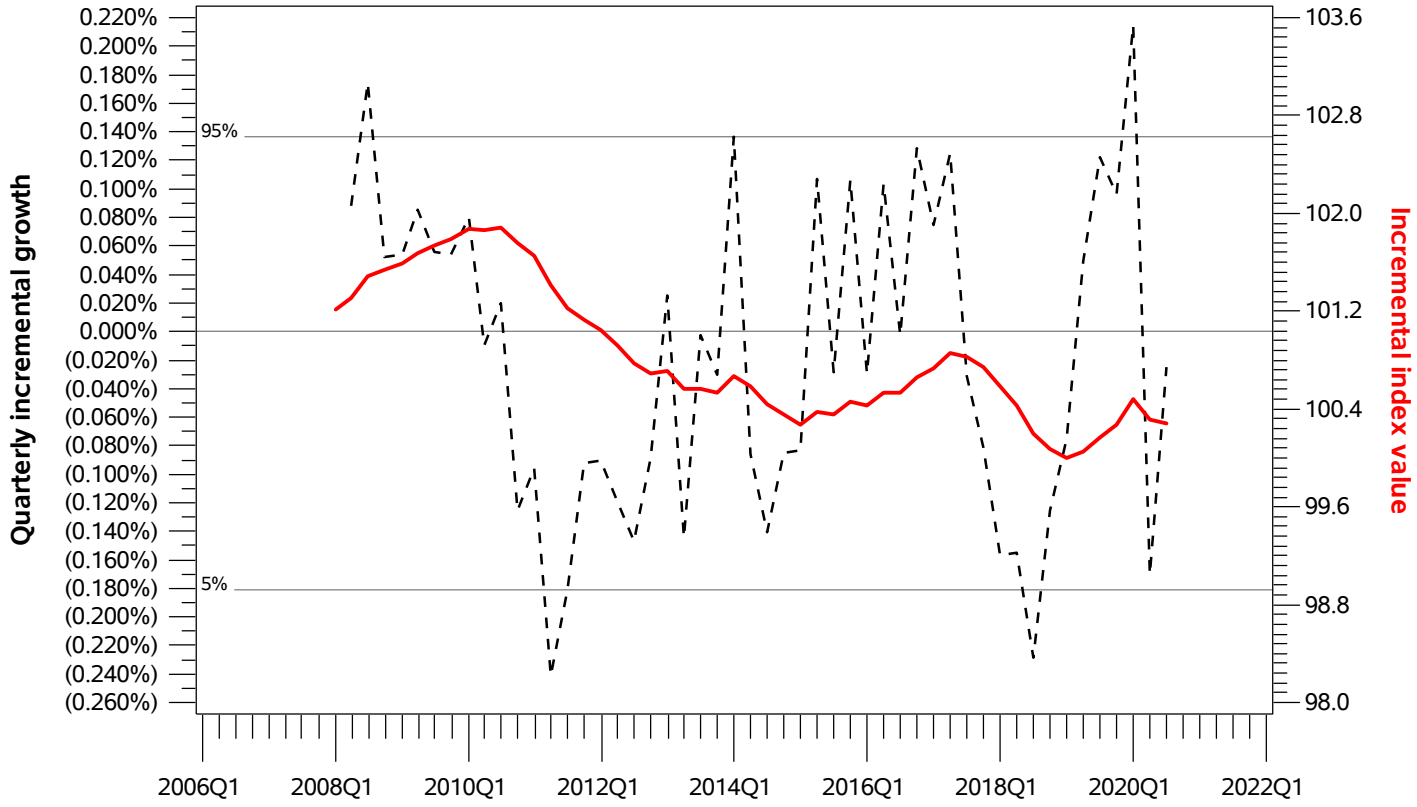


Table 10. ECI: COMP(PRIV) Installation, maintenance, and repair incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100004300001 and CIS20100000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.5069	Z_{Tau}	-3.5498
Prob Z_{Rho}	0.0052	Prob Z_{Tau}	0.0103

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0021	AR(1) coefficient	-0.6159
Standard error	0.0425	Standard error	0.1137
t-statistic	0.0500	t-statistic	-5.4158
Probability t	0.9604	Durbin-Watson	1.6118

Estimated incremental annual growth rate: 0.008%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

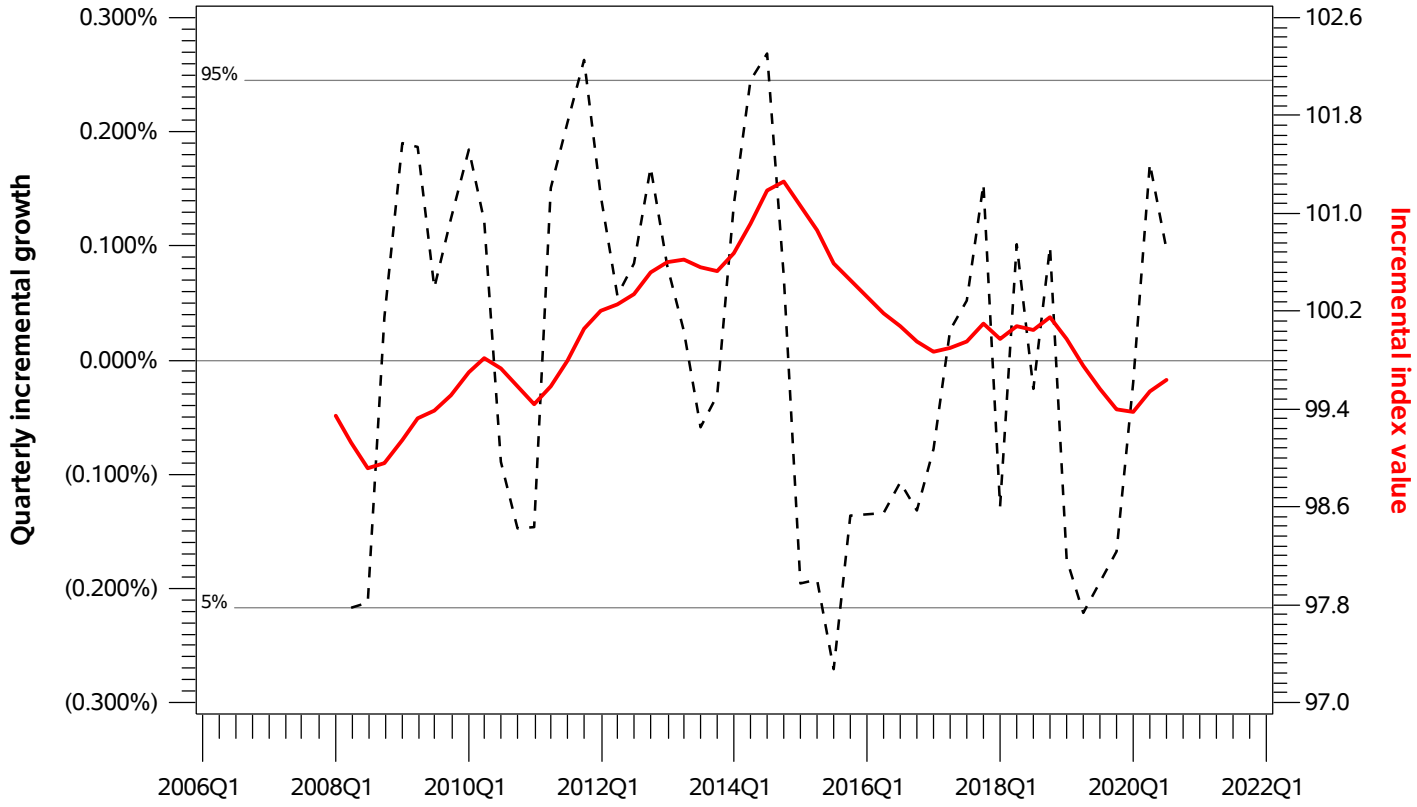


Table 11. ECI: COMP(PRIV) Production, transportation, and material moving incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS2010000500000I and CIS20100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-25.1229	Z_{Tau}	-4.0905
Prob Z_{Rho}	0.0011	Prob Z_{Tau}	0.0022

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0514	AR(1) coefficient	-0.4942
Standard error	0.0250	Standard error	0.1255
t-statistic	2.0556	t-statistic	-3.9384
Probability t	0.0453	Durbin-Watson	1.8552

Estimated incremental annual growth rate: 0.206%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.206%

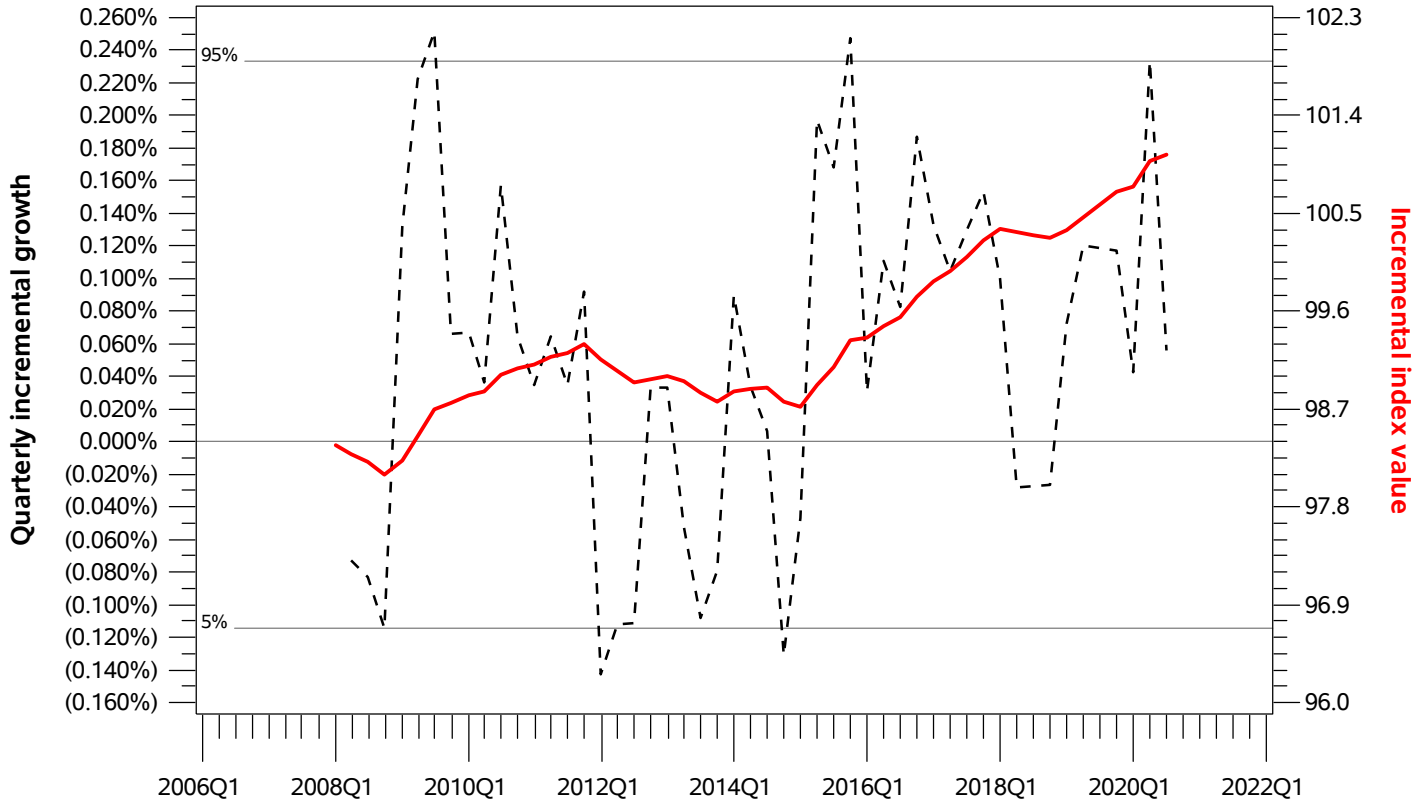


Table 12. ECI: COMP(PRIV) Production incremental growth over ECI: COMP(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20100005100001 and CIS20100000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.0051	Z_{Tau}	-3.6810
Prob Z_{Rho}	0.0032	Prob Z_{Tau}	0.0071

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0188	AR(1) coefficient	-0.5700
Standard error	0.0351	Standard error	0.1186
t-statistic	0.5361	t-statistic	-4.8057
Probability t	0.5943	Durbin-Watson	1.8111

Estimated incremental annual growth rate: 0.075%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

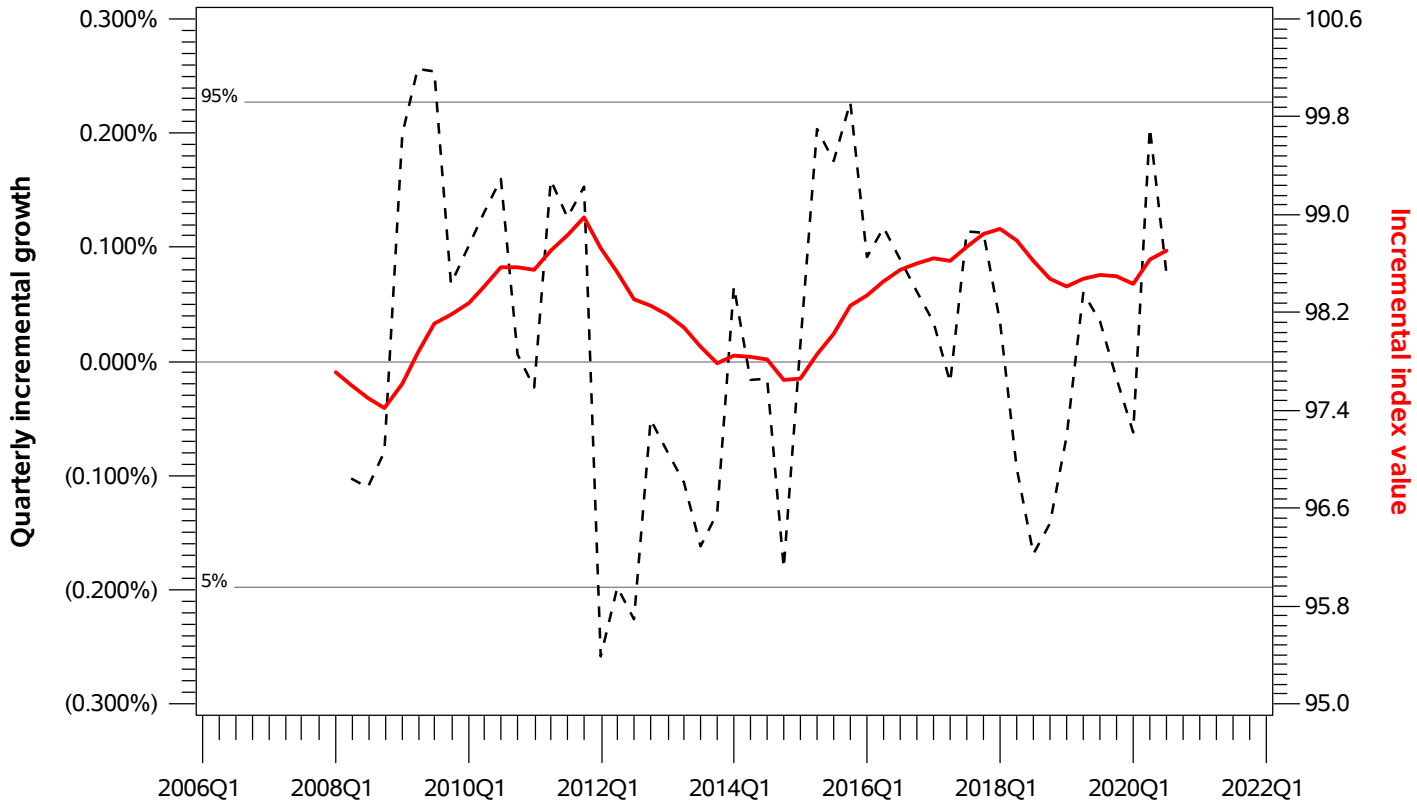


Table 13. ECI: COMP(PRIV) Transportation and material moving incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS2010000520000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-28.7585	Z_{Tau}	-4.3705
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0010

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0872	AR(1) coefficient	-0.4235
Standard error	0.0253	Standard error	0.1308
t-statistic	3.4426	t-statistic	-3.2391
Probability t	0.0012	Durbin-Watson	1.8317

Estimated incremental annual growth rate: 0.349%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.349%

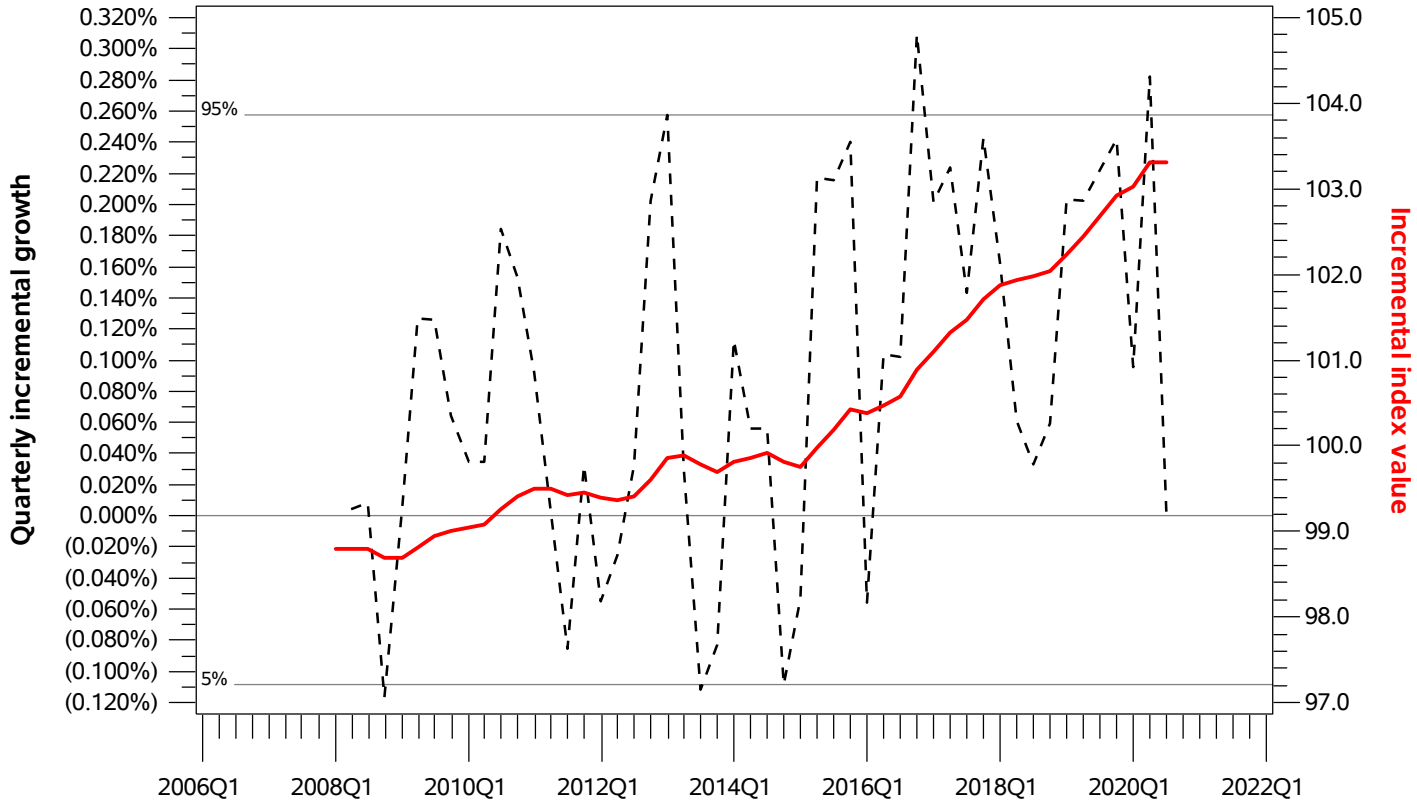


Table 14. ECI: COMP(PRIV) Construction incremental growth over ECI: COMP(PRIV) Goods-producing industries

LABSTAT series identifiers: CIS20123000000000I and CIS201G000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-12.2128	Z_{Tau}	-2.6172
Prob Z_{Rho}	0.0628	Prob Z_{Tau}	0.0961

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0178	AR(1) coefficient	-0.7921
Standard error	0.0548	Standard error	0.0881
t-statistic	-0.3250	t-statistic	-8.9919
Probability t	0.7466	Durbin-Watson	1.3507

Estimated incremental annual growth rate: (0.071%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

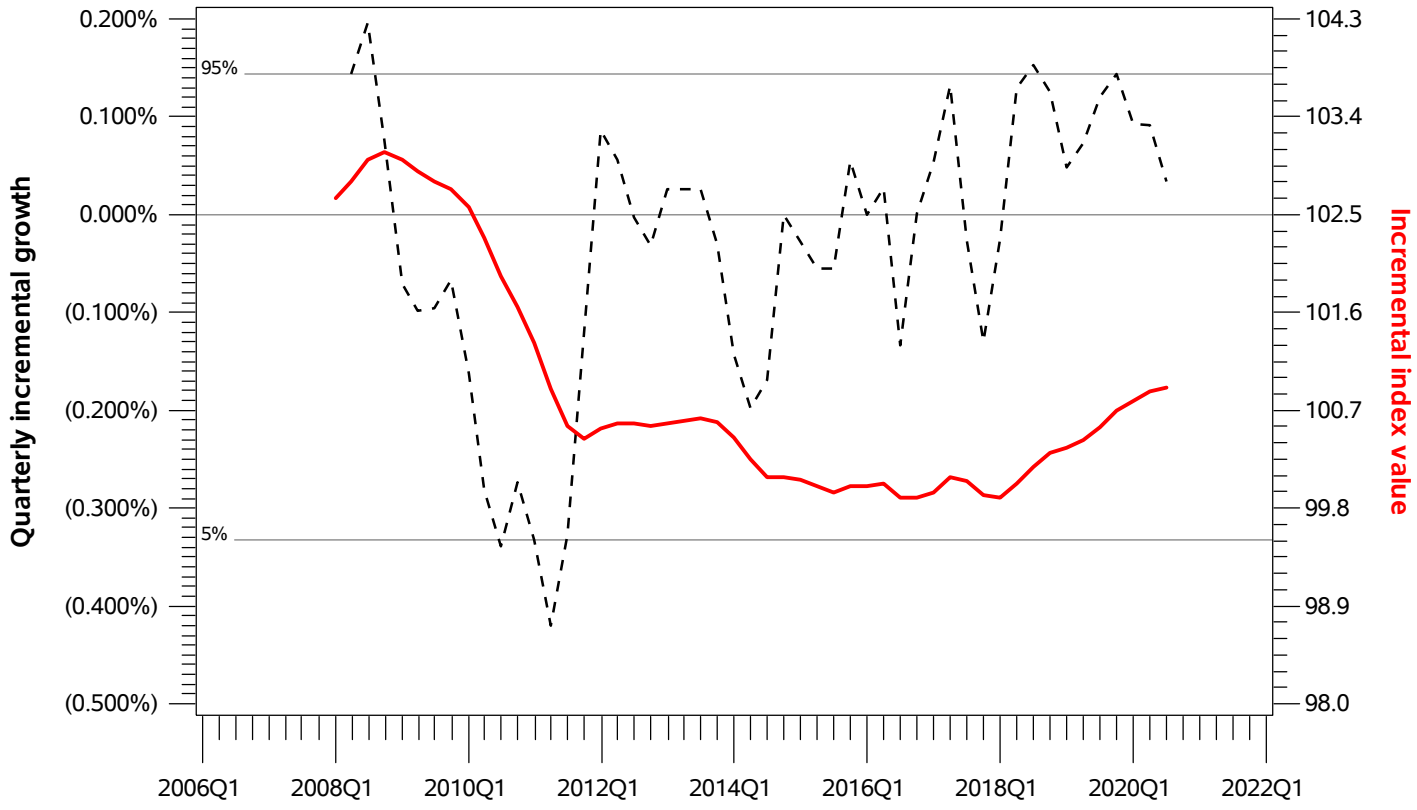


Table 15. ECI: COMP(PRIV) Aircraft manufacturing incremental growth over ECI: COMP(PRIV) Manufacturing

LABSTAT series identifiers: CIS2013211000000I and CIS2013000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.9187	Z_{Tau}	-3.3823
Prob Z_{Rho}	0.0045	Prob Z_{Tau}	0.0161

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0823	AR(1) coefficient	-0.6754
Standard error	0.3798	Standard error	0.1064
t-statistic	0.2167	t-statistic	-6.3455
Probability t	0.8294	Durbin-Watson	1.2068

Estimated incremental annual growth rate: 0.330%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

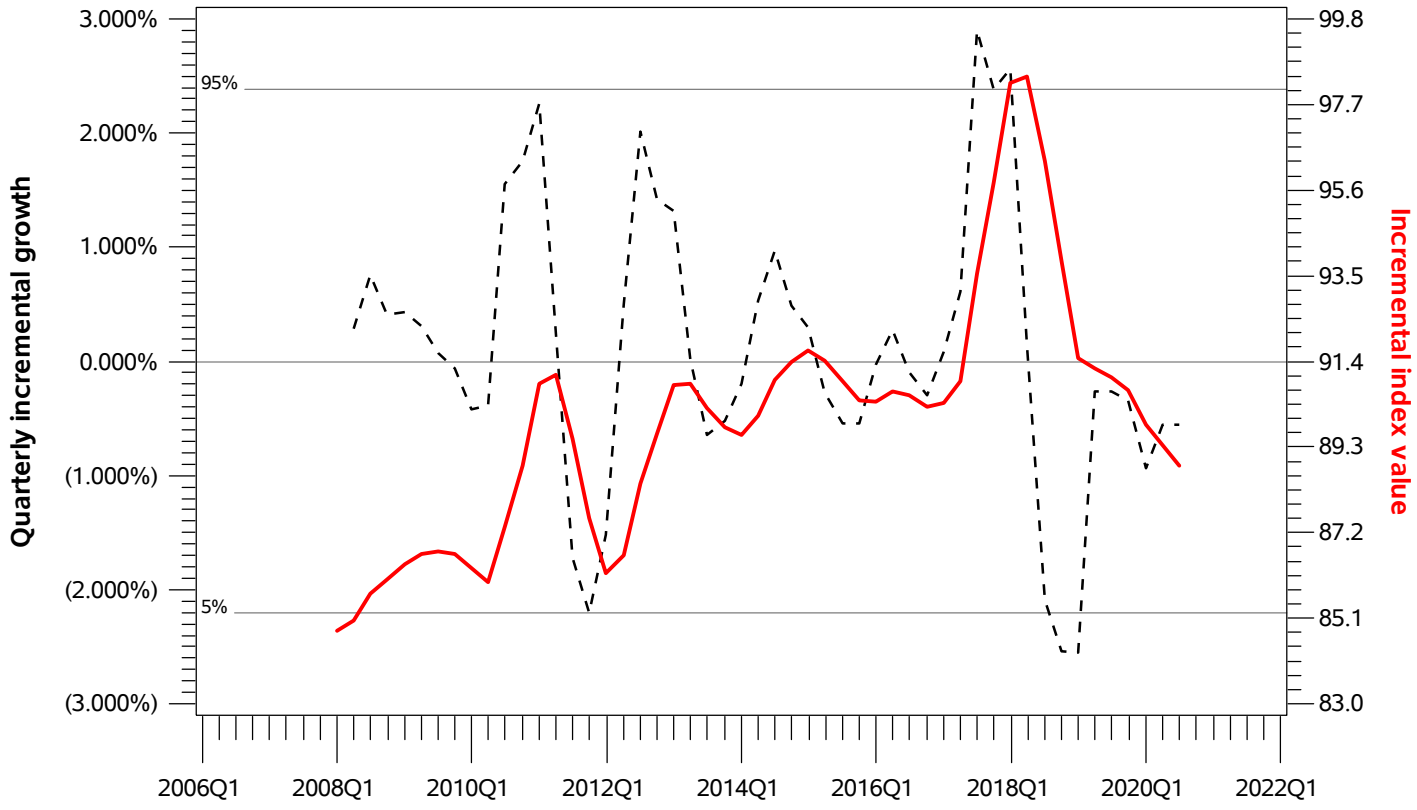


Table 16. ECI: COMP(PRIV) Trade, transportation, and utilities incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20140000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.1591	Z_{Tau}	-3.4533
Prob Z_{Rho}	0.0058	Prob Z_{Tau}	0.0133

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0556	AR(1) coefficient	-0.5931
Standard error	0.0240	Standard error	0.1162
t-statistic	2.3227	t-statistic	-5.1032
Probability t	0.0245	Durbin-Watson	1.9068

Estimated incremental annual growth rate: 0.223%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.223%

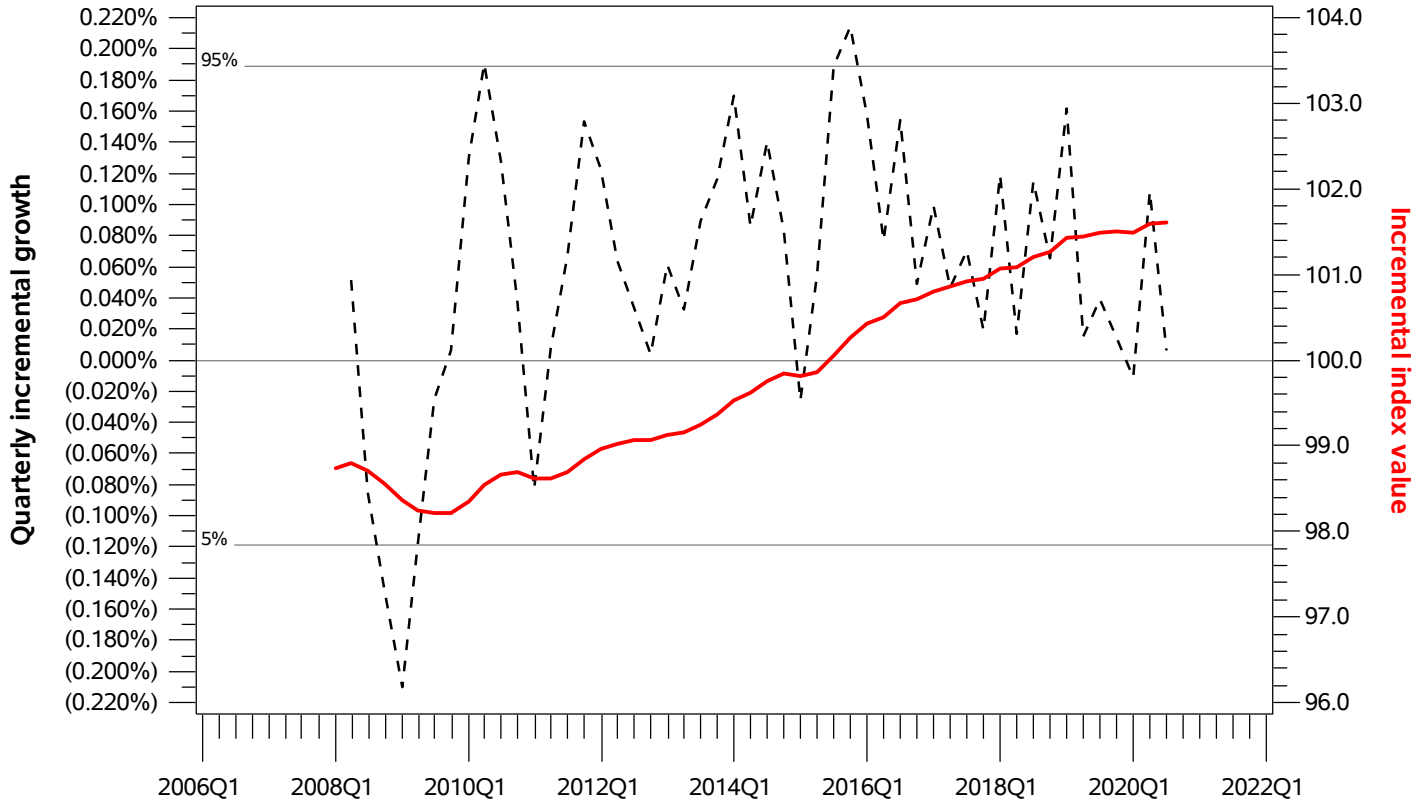


Table 17. ECI: COMP(PRIV) Wholesale trade incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20141100000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.3505	Z_{Tau}	-3.5240
Prob Z_{Rho}	0.0054	Prob Z_{Tau}	0.0110

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0041	AR(1) coefficient	-0.5741
Standard error	0.0702	Standard error	0.1182
t-statistic	-0.0579	t-statistic	-4.8573
Probability t	0.9540	Durbin-Watson	2.0359

Estimated incremental annual growth rate: (0.016%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

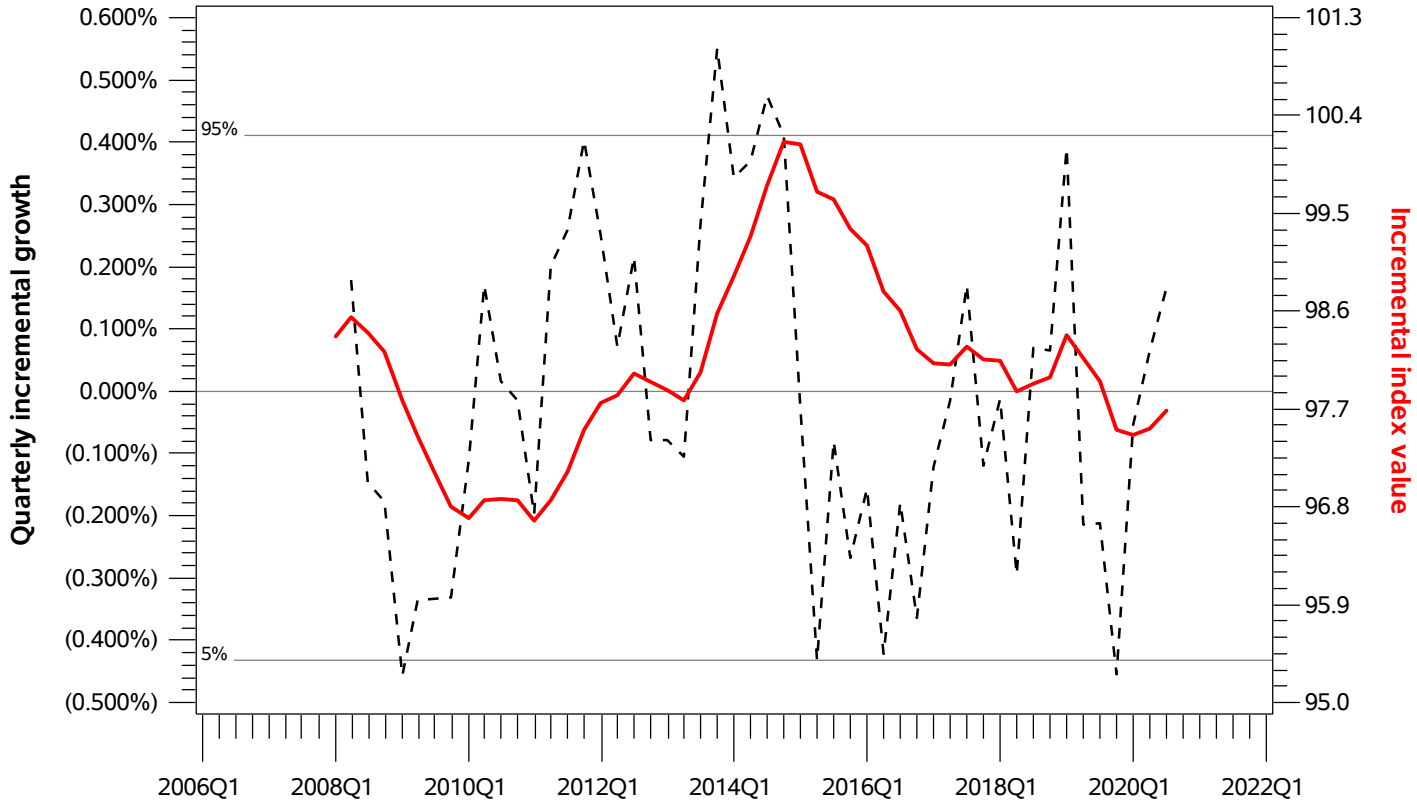


Table 18. ECI: COMP(PRIV) Retail trade incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20141200000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-12.0565	Z_{Tau}	-2.4979
Prob Z_{Rho}	0.0656	Prob Z_{Tau}	0.1218

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0461	AR(1) coefficient	-0.7989
Standard error	0.0717	Standard error	0.0868
t-statistic	0.6421	t-statistic	-9.2027
Probability t	0.5239	Durbin-Watson	1.3938

Estimated incremental annual growth rate: 0.184%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

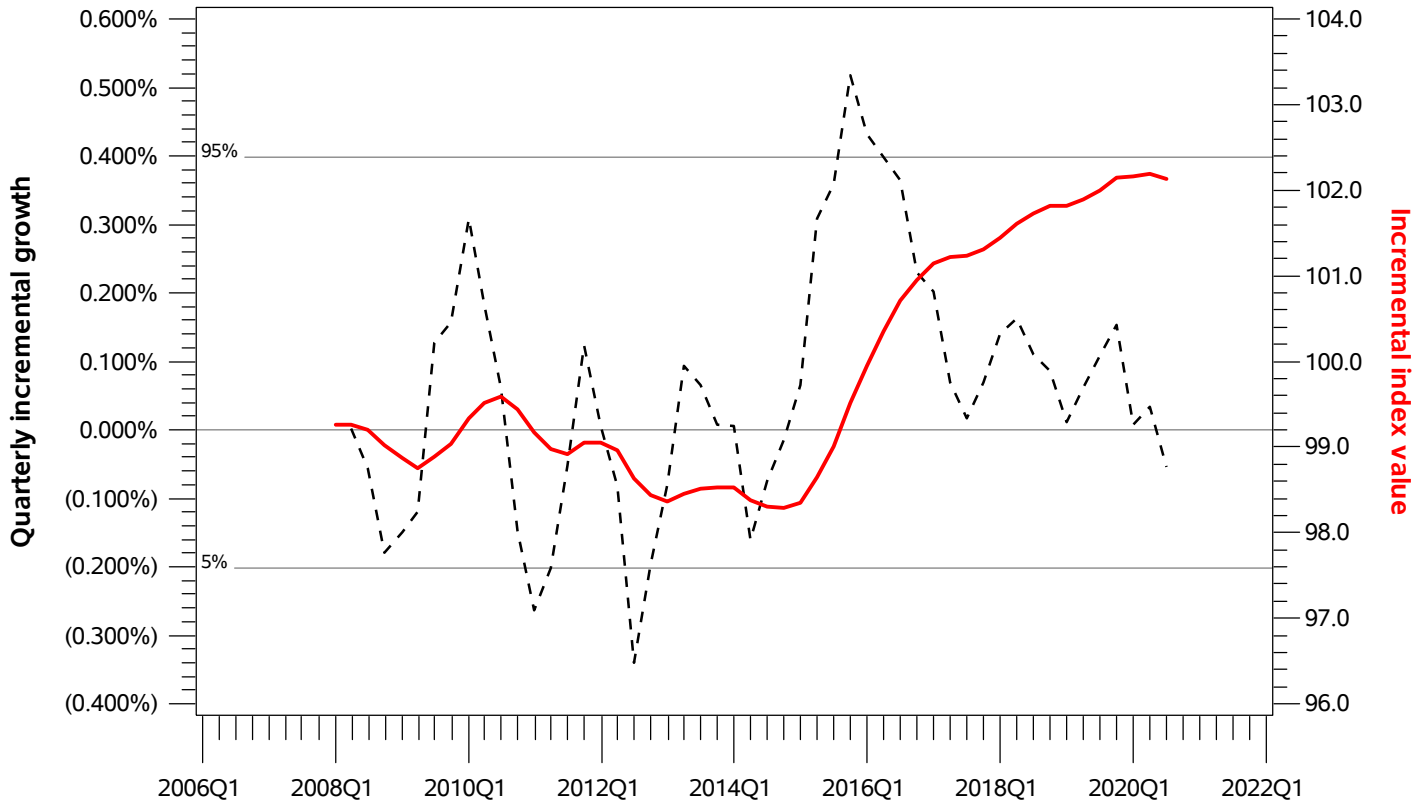


Table 19. ECI: COMP(PRIV) Transportation and warehousing incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20143000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.8148	Z_{Tau}	-3.7753
Prob Z_{Rho}	0.0025	Prob Z_{Tau}	0.0055

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.1224	AR(1) coefficient	-0.5328
Standard error	0.0393	Standard error	0.1221
t-statistic	3.1103	t-statistic	-4.3624
Probability t	0.0031	Durbin-Watson	1.8456

Estimated incremental annual growth rate: 0.490%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.490%

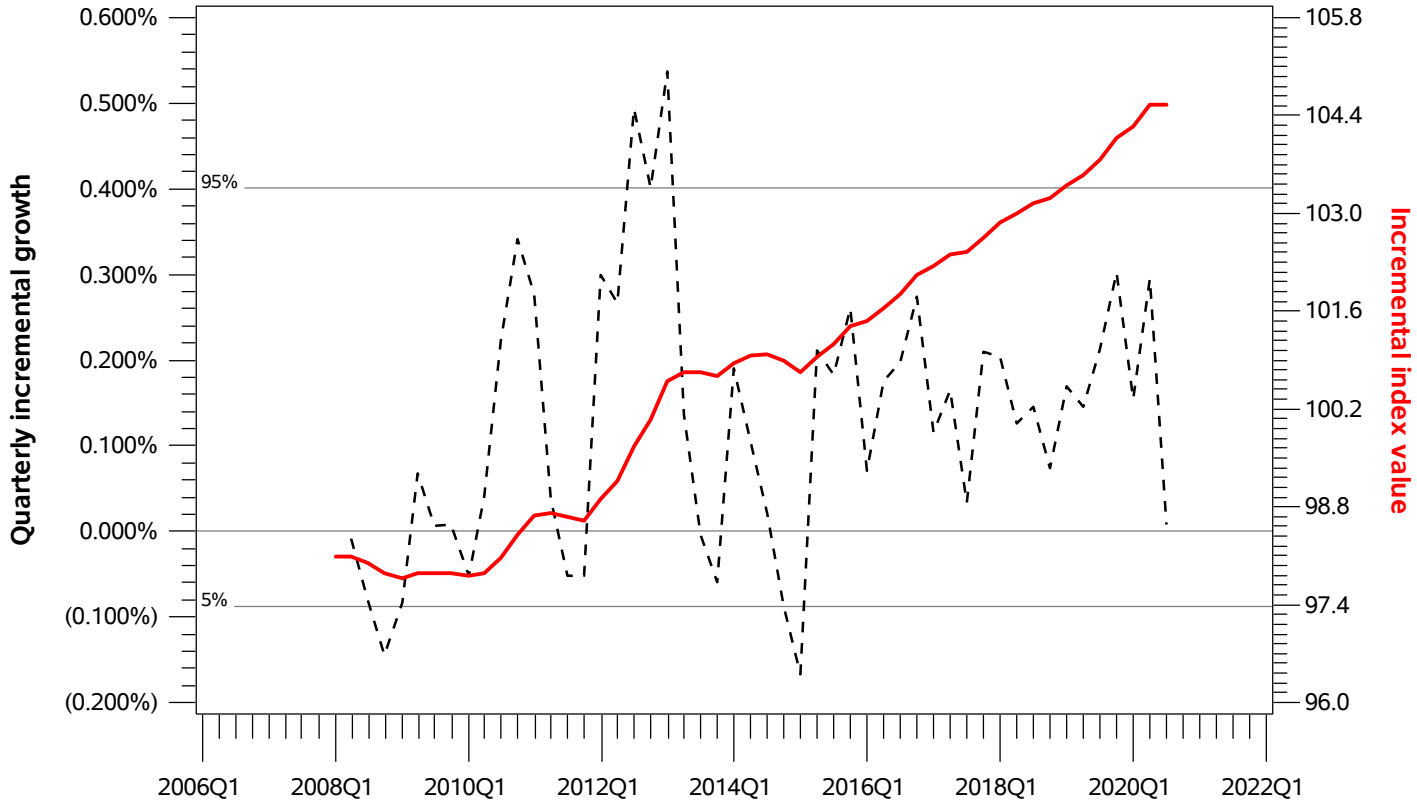


Table 20. ECI: COMP(PRIV) Utilities incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20144000000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-15.7034	Z_{Tau}	-2.9038
Prob Z_{Rho}	0.0229	Prob Z_{Tau}	0.0518

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.1586	AR(1) coefficient	-0.6859
Standard error	0.0992	Standard error	0.1050
t-statistic	1.5986	t-statistic	-6.5295
Probability t	0.1165	Durbin-Watson	1.7485

Estimated incremental annual growth rate: 0.636%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

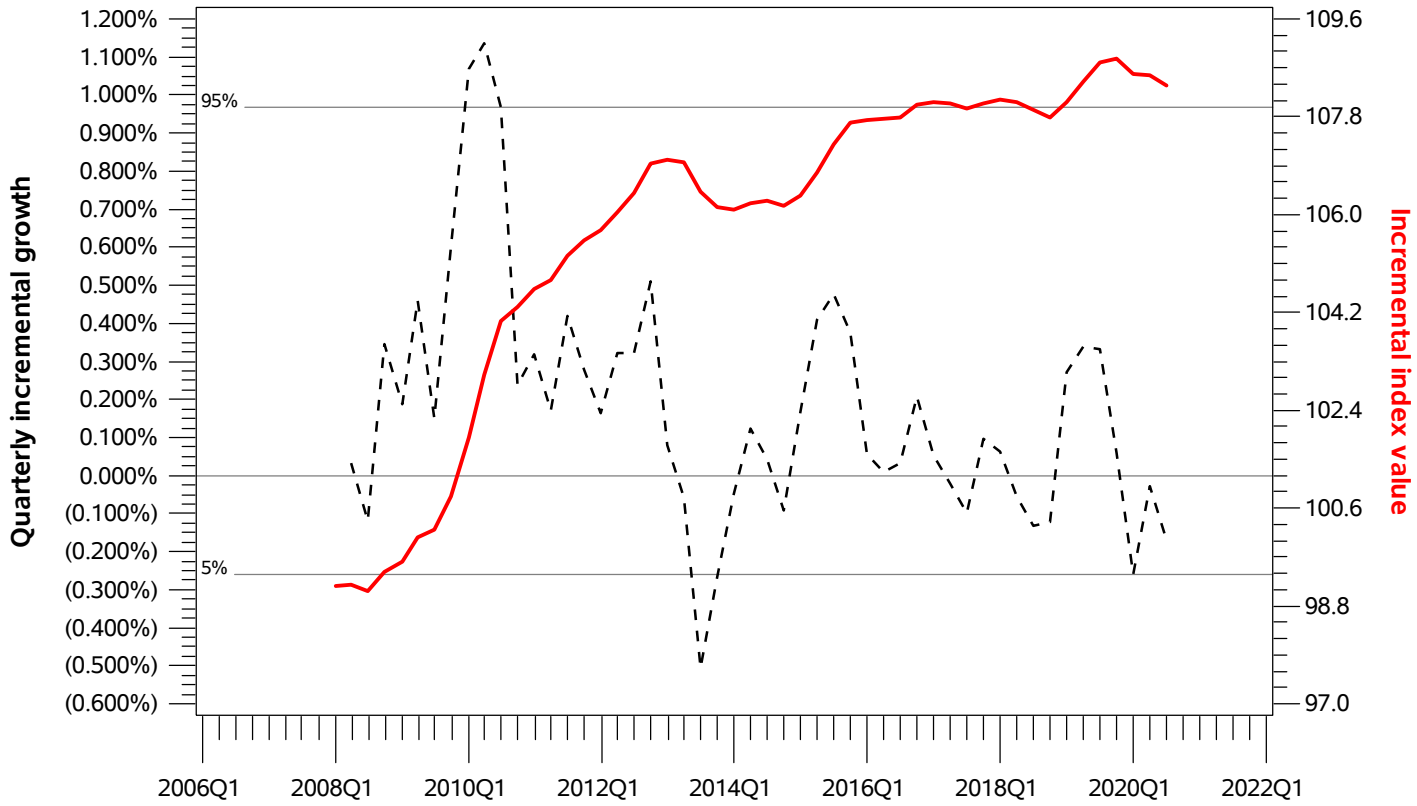


Table 21. ECI: COMP(PRIV) Information incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20151000000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.6407	Z_{Tau}	-3.6405
Prob Z_{Rho}	0.0026	Prob Z_{Tau}	0.0080

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0304	AR(1) coefficient	-0.6162
Standard error	0.1364	Standard error	0.1137
t-statistic	-0.2231	t-statistic	-5.4212
Probability t	0.8244	Durbin-Watson	1.4518

Estimated incremental annual growth rate: (0.122%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

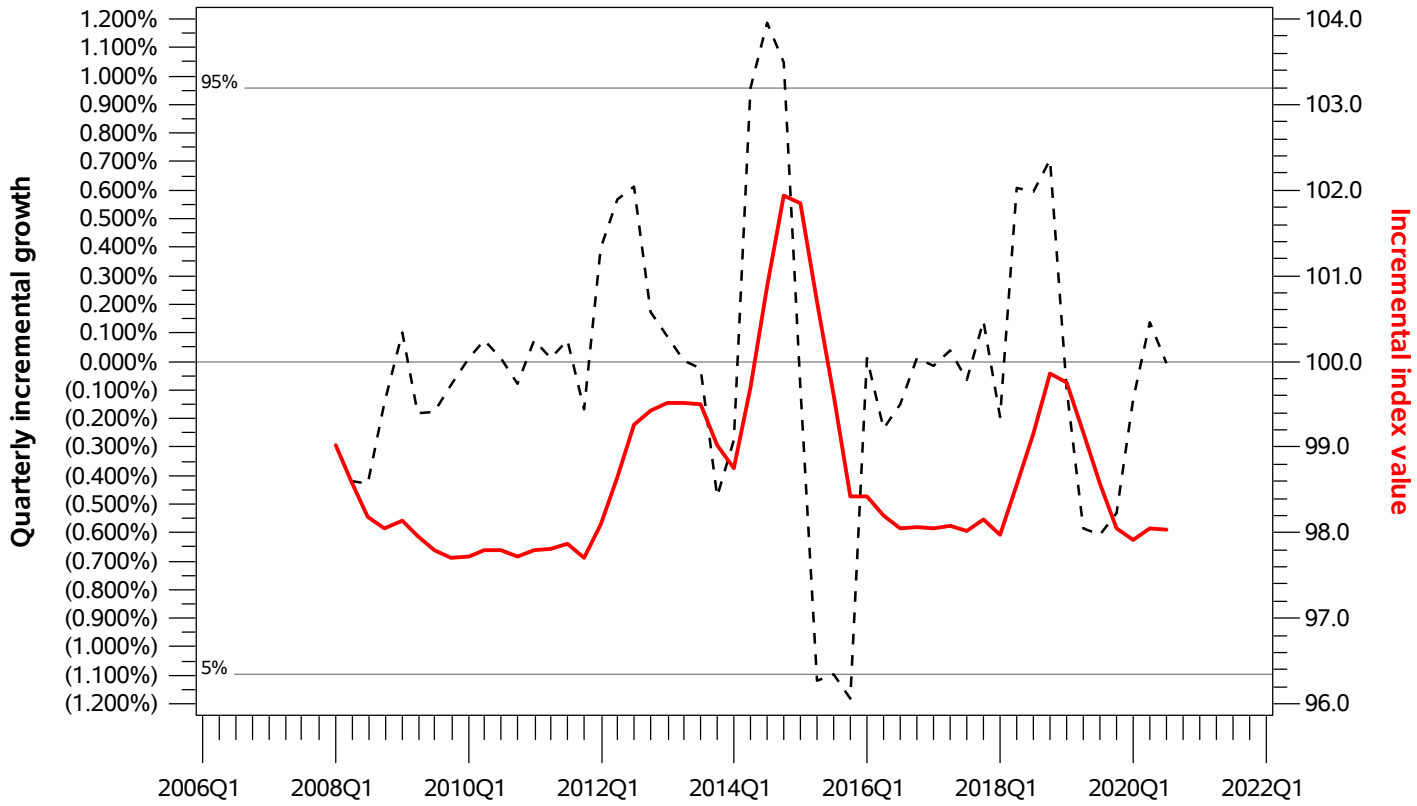


Table 22. ECI: COMP(PRIV) Finance and insurance incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20152000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.2069	Z_{Tau}	-3.5055
Prob Z_{Rho}	0.0041	Prob Z_{Tau}	0.0116

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0133	AR(1) coefficient	-0.6280
Standard error	0.0606	Standard error	0.1123
t-statistic	0.2188	t-statistic	-5.5904
Probability t	0.8277	Durbin-Watson	1.5376

Estimated incremental annual growth rate: 0.053%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

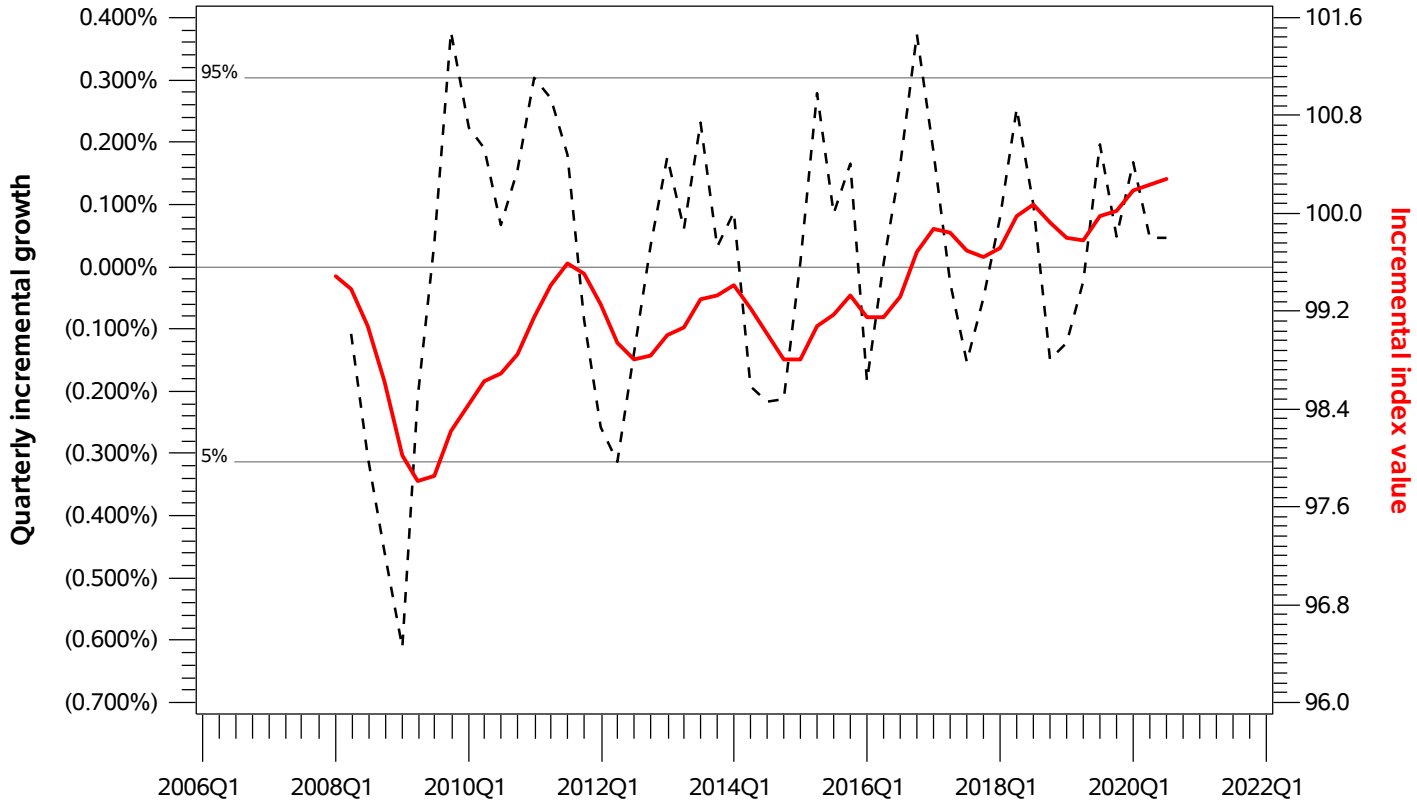


Table 23. ECI: COMP(PRIV) Financial activities incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS201520A000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.4167	Z_{Tau}	-3.6039
Prob Z_{Rho}	0.0028	Prob Z_{Tau}	0.0089

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0116	AR(1) coefficient	-0.6161
Standard error	0.0512	Standard error	0.1137
t-statistic	0.2273	t-statistic	-5.4197
Probability t	0.8211	Durbin-Watson	1.4806

Estimated incremental annual growth rate: 0.047%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

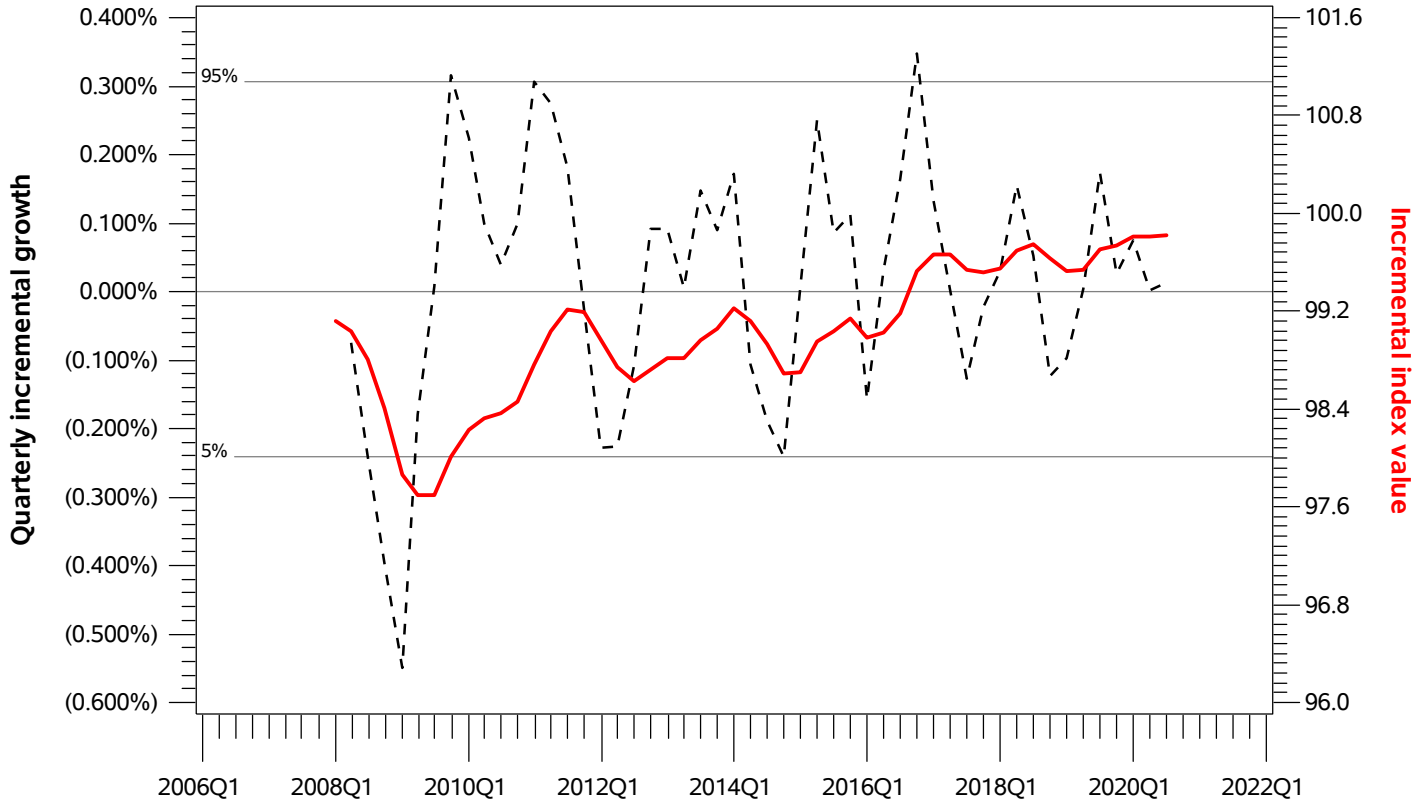


Table 24. ECI: COMP(PRIV) Credit intermediation and related activities incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS2015220000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.6221	Z_{Tau}	-3.1921
Prob Z_{Rho}	0.0094	Prob Z_{Tau}	0.0261

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0274	AR(1) coefficient	-0.7039
Standard error	0.0675	Standard error	0.1025
t-statistic	0.4056	t-statistic	-6.8664
Probability t	0.6869	Durbin-Watson	1.3362

Estimated incremental annual growth rate: 0.110%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

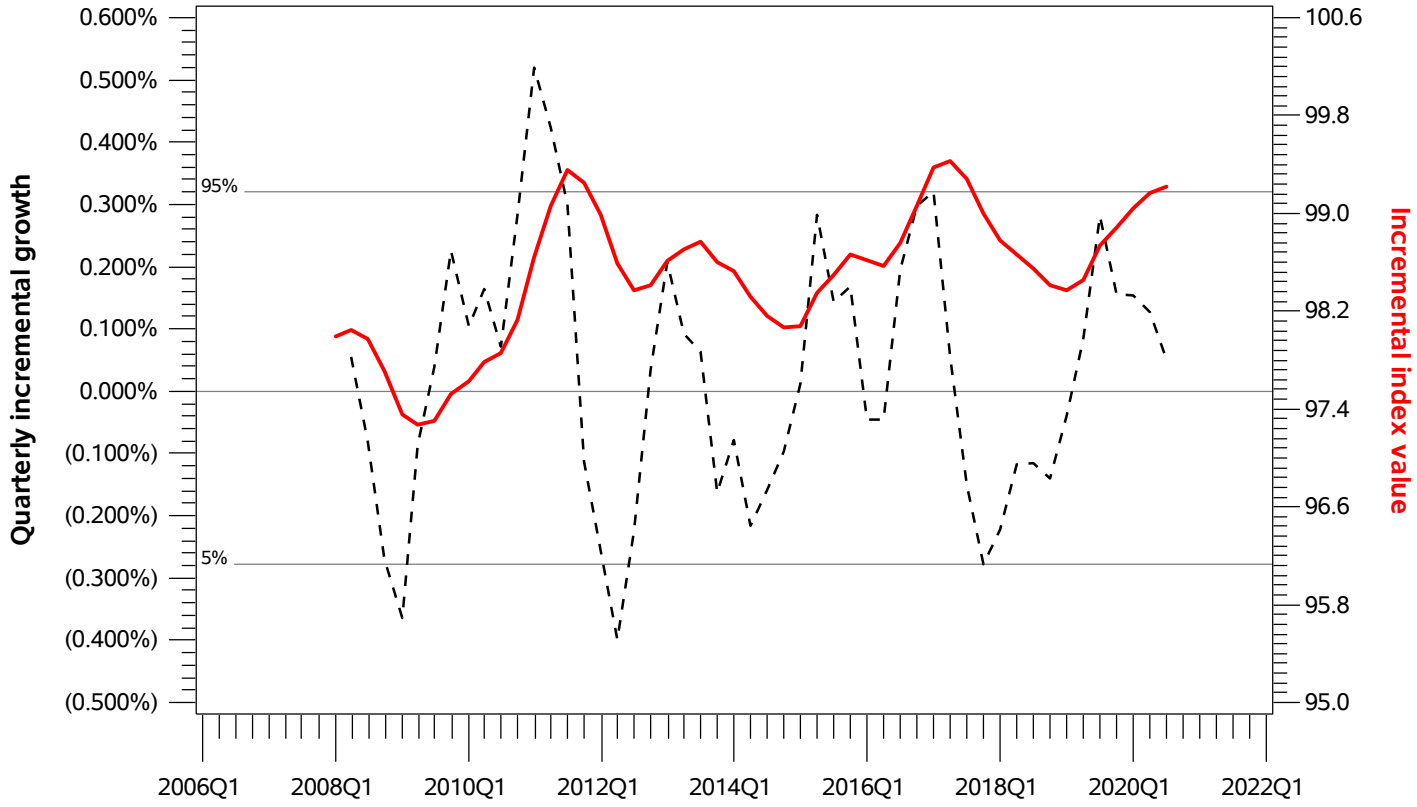


Table 25. ECI: COMP(PRIV) Insurance carriers and related activities incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS2015240000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.5288	Z_{Tau}	-3.5911
Prob Z_{Rho}	0.0027	Prob Z_{Tau}	0.0092

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0163	AR(1) coefficient	-0.5980
Standard error	0.0535	Standard error	0.1157
t-statistic	0.3049	t-statistic	-5.1686
Probability t	0.7618	Durbin-Watson	1.5767

Estimated incremental annual growth rate: 0.065%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

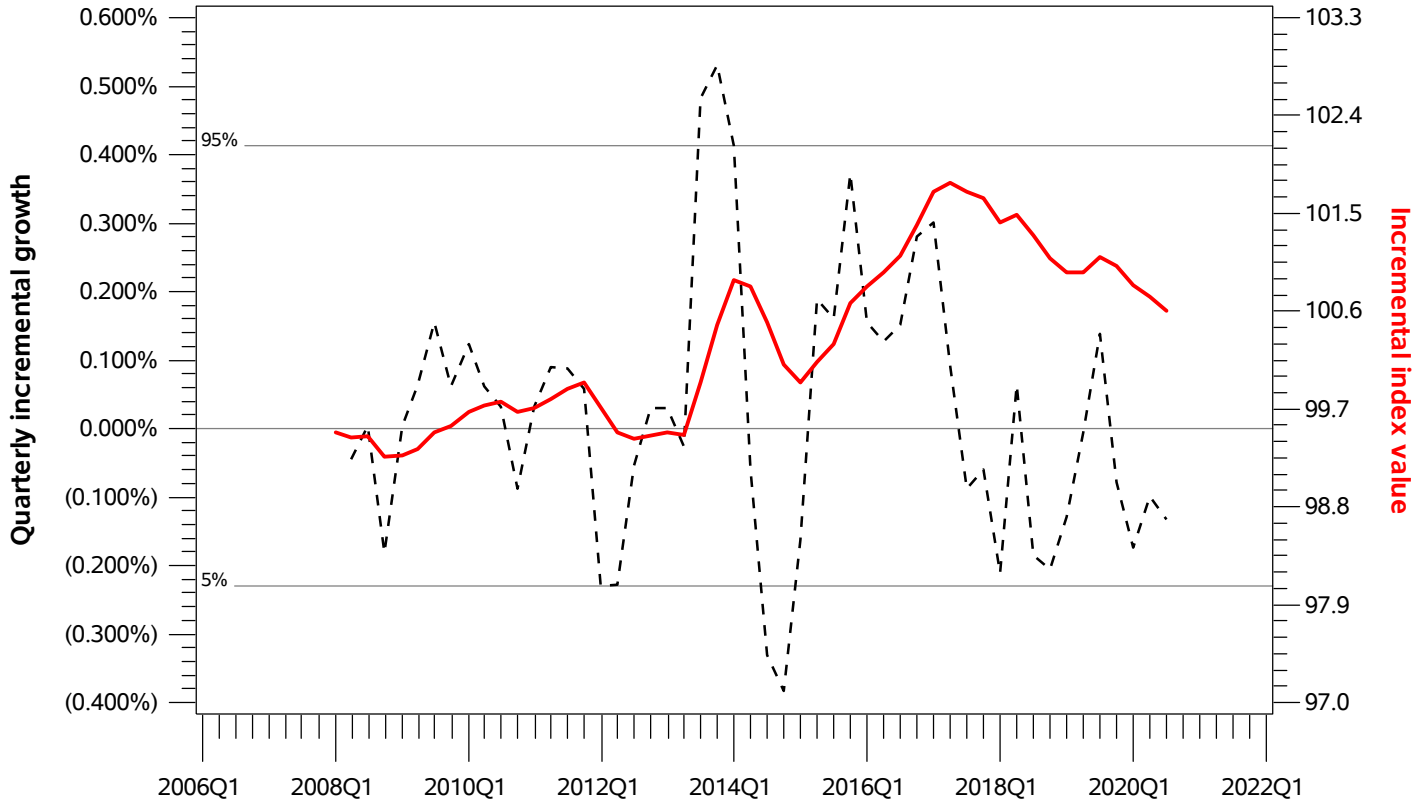


Table 26. ECI: COMP(PRIV) Real estate and rental and leasing incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20153000000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-30.0469	Z_{Tau}	-4.3585
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0010

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0020	AR(1) coefficient	-0.4330
Standard error	0.0418	Standard error	0.1301
t-statistic	0.0473	t-statistic	-3.3280
Probability t	0.9624	Durbin-Watson	1.7149

Estimated incremental annual growth rate: 0.008%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

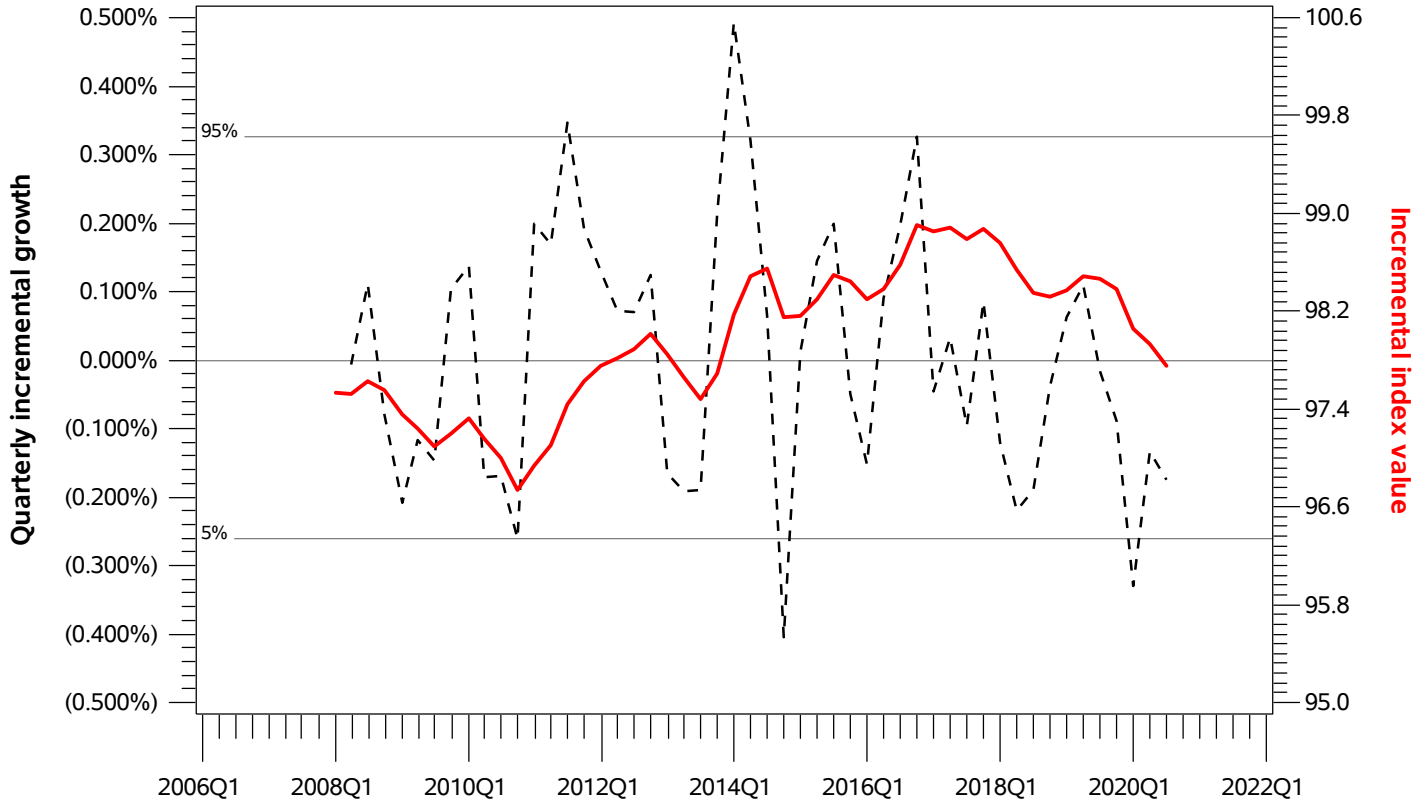


Table 27. ECI: COMP(PRIV) Professional, scientific, and technical services incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20154000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-28.8472	Z_{Tau}	-4.5816
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0005

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0158	AR(1) coefficient	-0.3824
Standard error	0.0368	Standard error	0.1334
t-statistic	-0.4309	t-statistic	-2.8669
Probability t	0.6685	Durbin-Watson	1.9883

Estimated incremental annual growth rate: (0.063%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

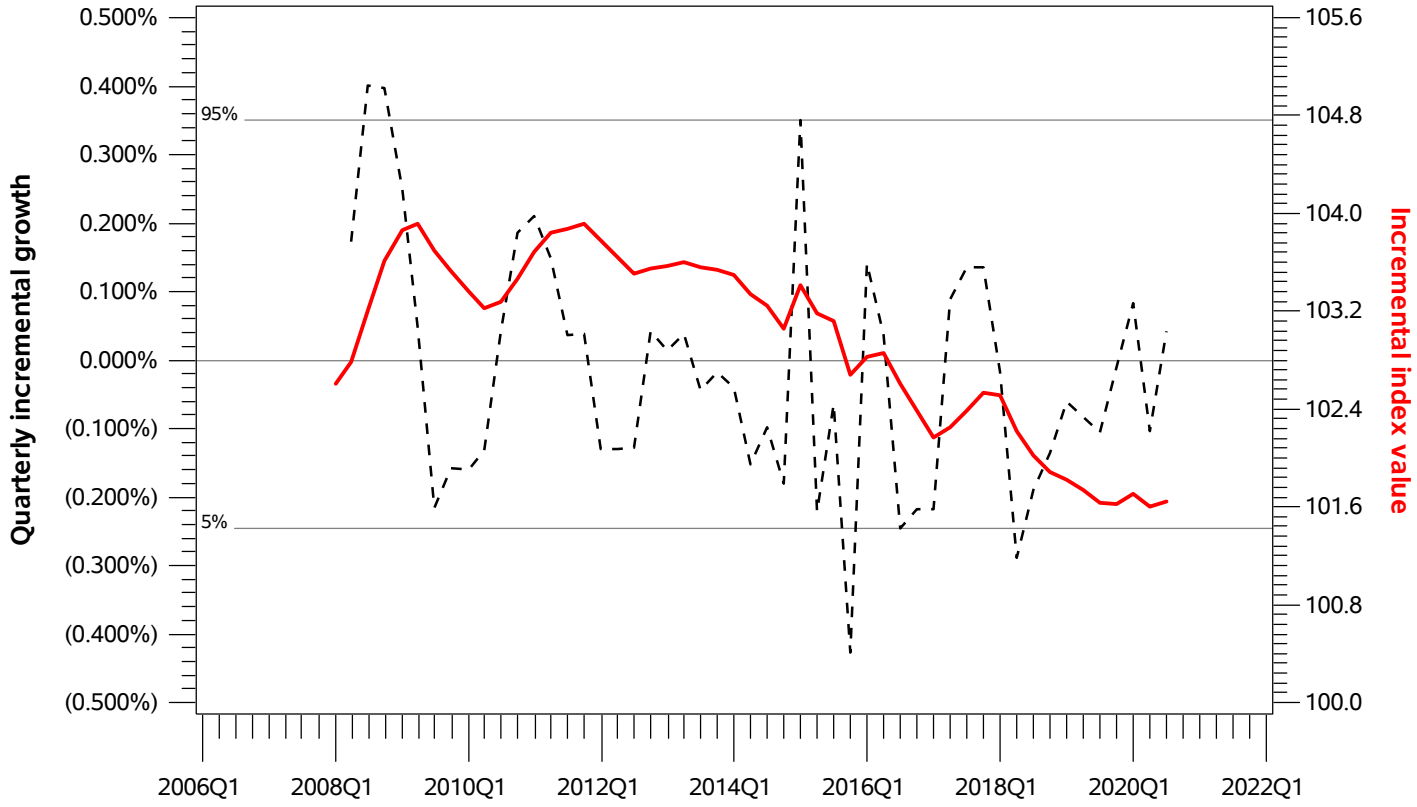


Table 28. ECI: COMP(PRIV) Professional and business services incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS201540A000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.9600	Z_{Tau}	-3.6378
Prob Z_{Rho}	0.0032	Prob Z_{Tau}	0.0081

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0107	AR(1) coefficient	-0.5853
Standard error	0.0334	Standard error	0.1170
t-statistic	-0.3194	t-statistic	-5.0018
Probability t	0.7508	Durbin-Watson	1.6245

Estimated incremental annual growth rate: (0.043%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

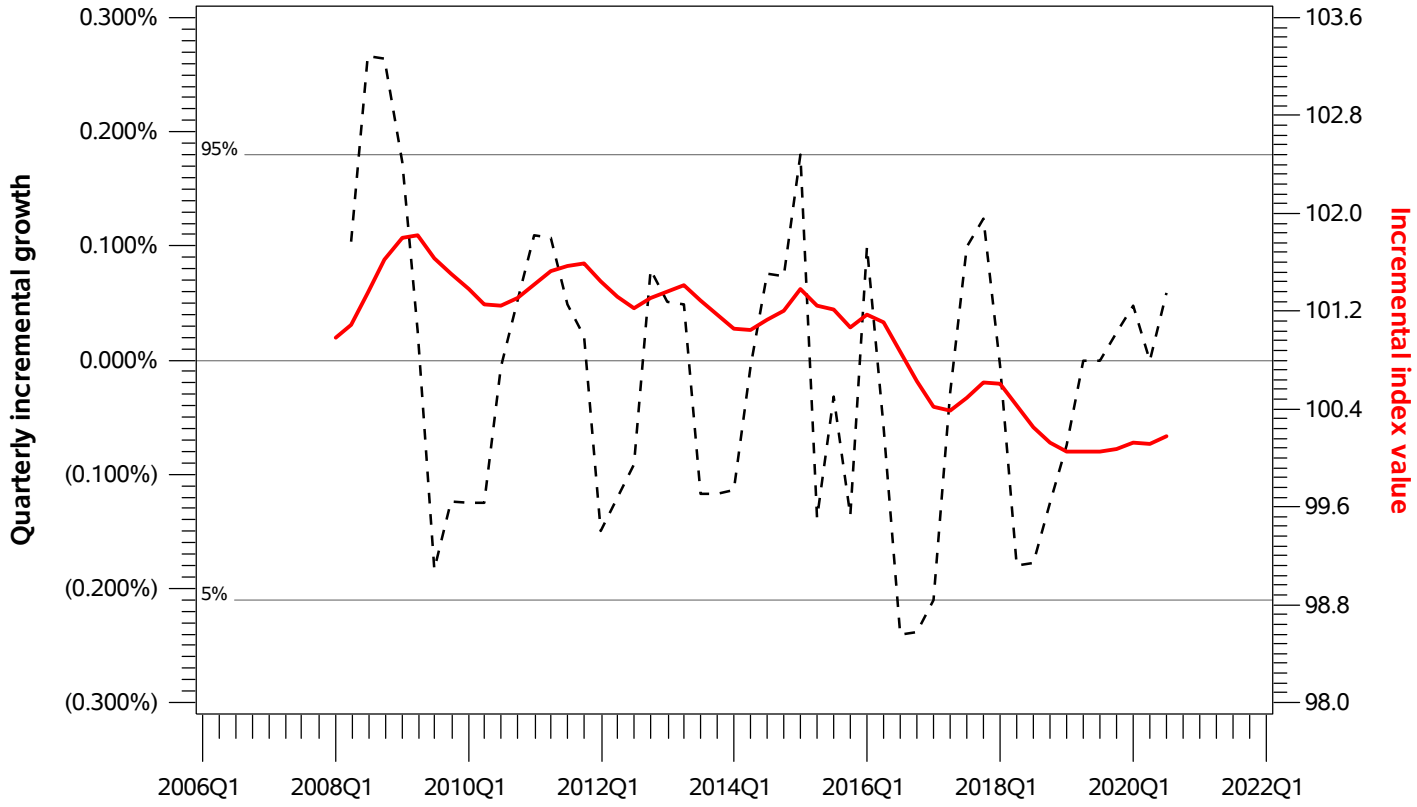


Table 29. ECI: COMP(PRIV) Education and health services incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20160000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.0267	Z_{Tau}	-3.2528
Prob Z_{Rho}	0.0113	Prob Z_{Tau}	0.0224

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0472	AR(1) coefficient	-0.6433
Standard error	0.0332	Standard error	0.1105
t-statistic	-1.4242	t-statistic	-5.8221
Probability t	0.1609	Durbin-Watson	1.8347

Estimated incremental annual growth rate: (0.189%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

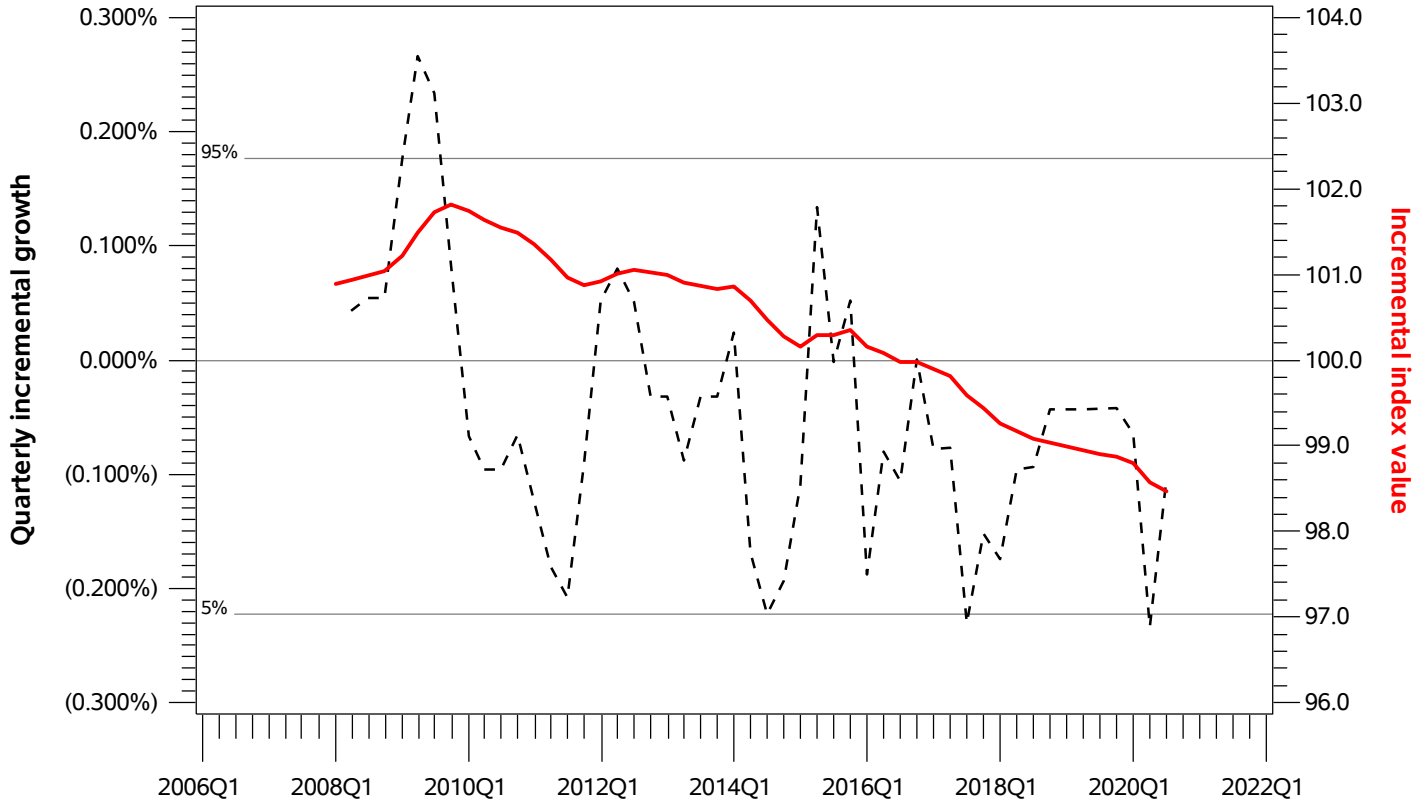


Table 30. ECI: COMP(PRIV) Education services incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20161000000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-11.9237	Z_{Tau}	-2.6507
Prob Z_{Rho}	0.0680	Prob Z_{Tau}	0.0897

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0105	AR(1) coefficient	-0.7271
Standard error	0.0464	Standard error	0.0991
t-statistic	-0.2273	t-statistic	-7.3365
Probability t	0.8211	Durbin-Watson	1.8145

Estimated incremental annual growth rate: (0.042%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

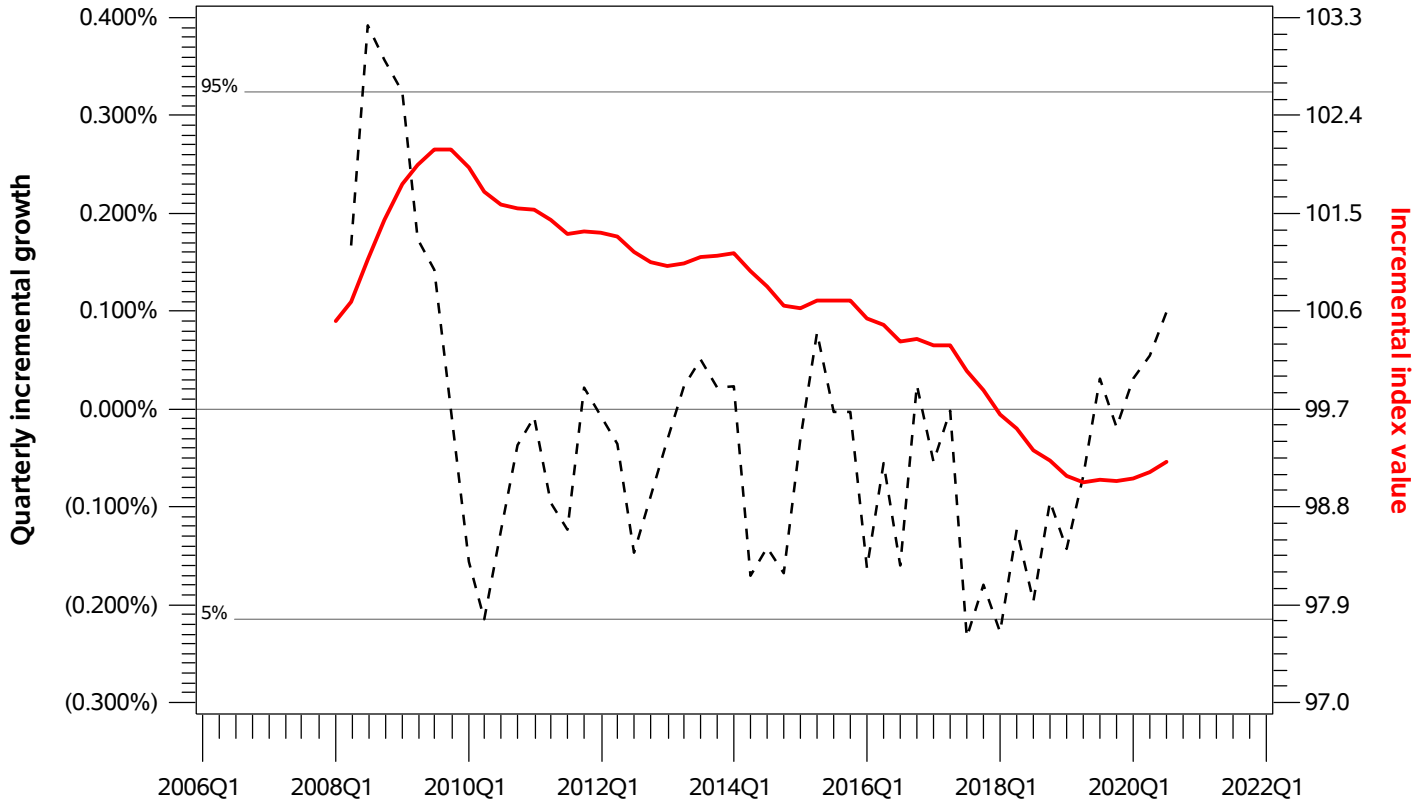


Table 31. ECI: COMP(PRIV) Junior colleges, colleges, and universities incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20161200000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-14.8120	Z_{Tau}	-2.9773
Prob Z_{Rho}	0.0298	Prob Z_{Tau}	0.0438

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0073	AR(1) coefficient	-0.7288
Standard error	0.0525	Standard error	0.0988
t-statistic	0.1397	t-statistic	-7.3747
Probability t	0.8895	Durbin-Watson	1.4218

Estimated incremental annual growth rate: 0.029%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

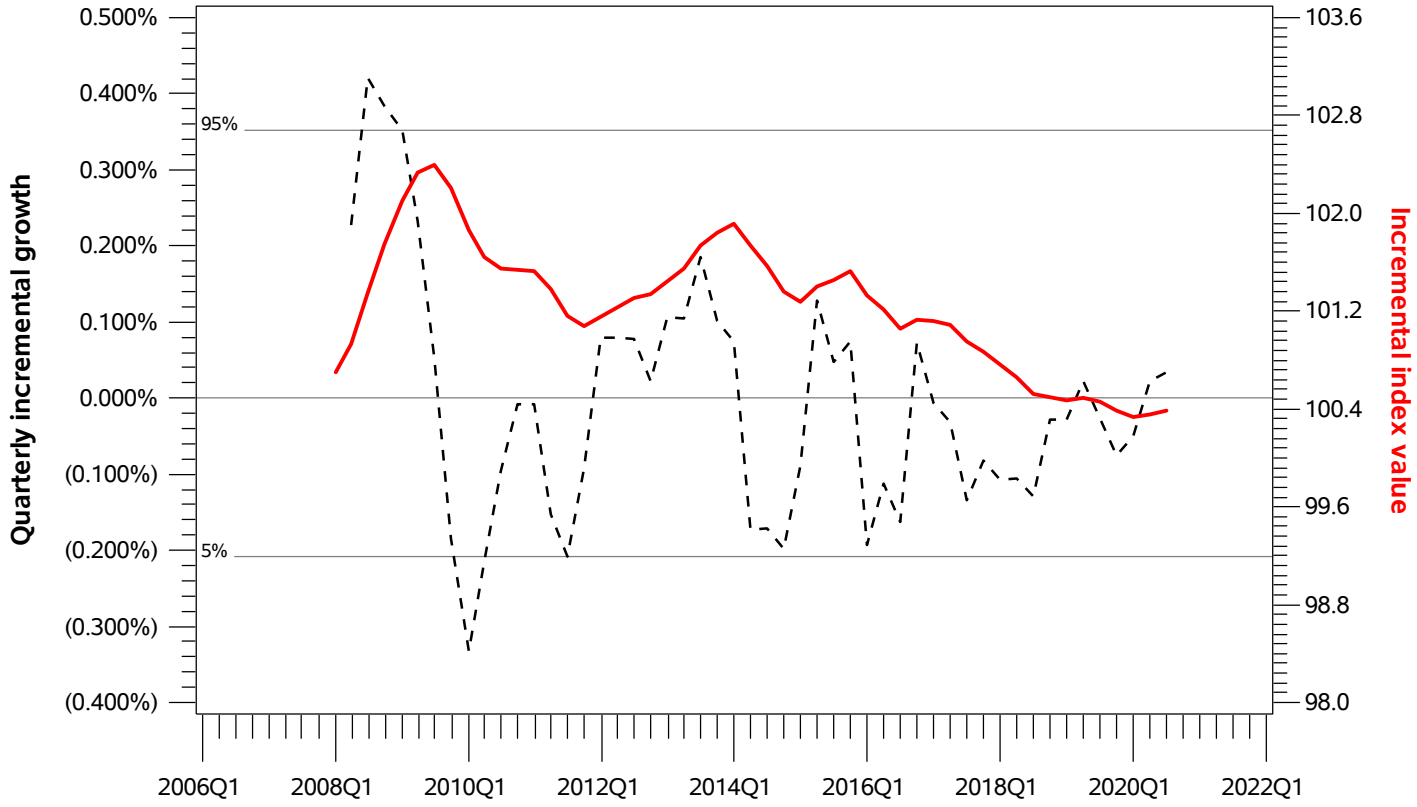


Table 32. ECI: COMP(PRIV) Health care and social assistance incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20162000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.2790	Z_{Tau}	-3.3737
Prob Z_{Rho}	0.0076	Prob Z_{Tau}	0.0164

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0530	AR(1) coefficient	-0.6042
Standard error	0.0325	Standard error	0.1150
t-statistic	-1.6324	t-statistic	-5.2533
Probability t	0.1091	Durbin-Watson	1.9424

Estimated incremental annual growth rate: (0.212%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

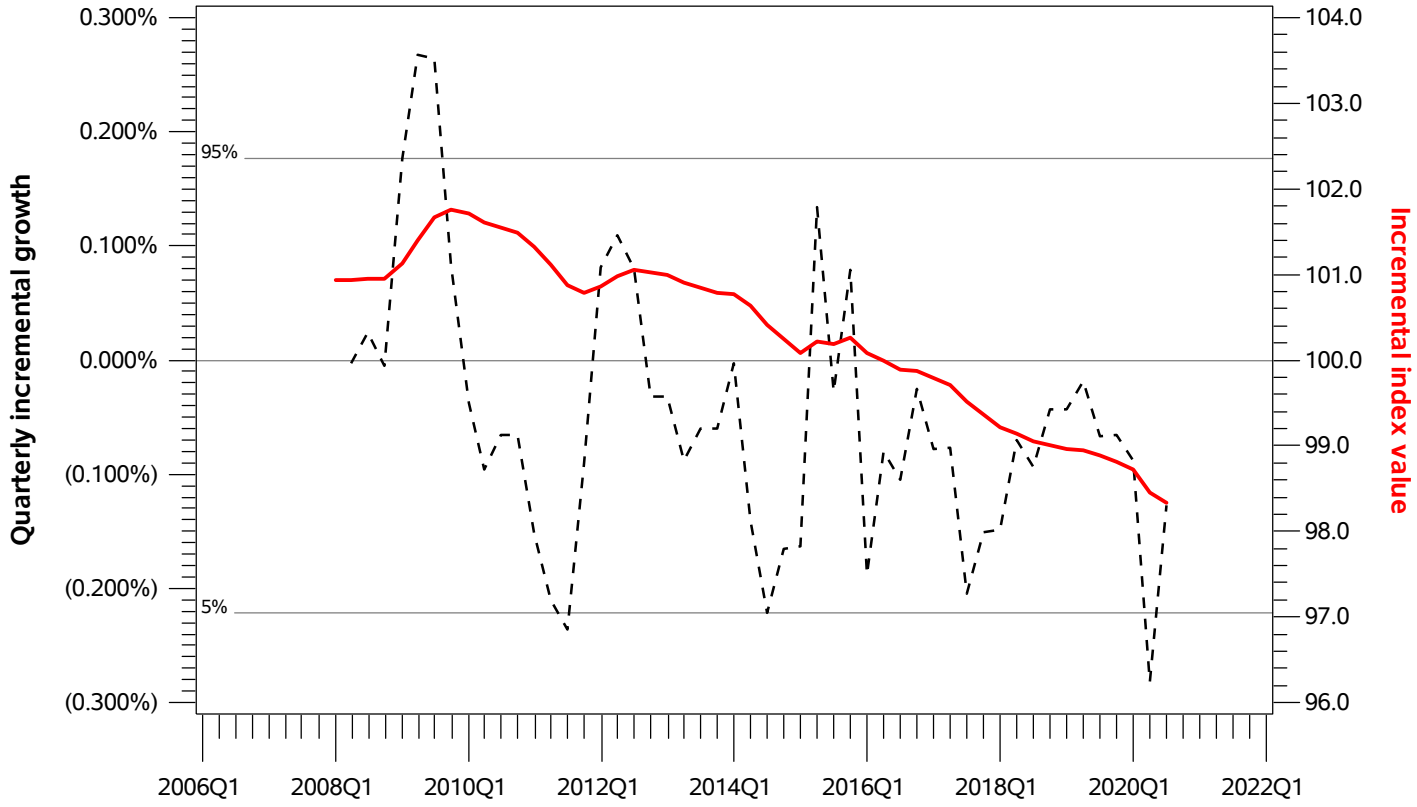


Table 33. ECI: COMP(PRIV) Hospitals incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS2016220000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-13.2258	Z_{Tau}	-2.7689
Prob Z_{Rho}	0.0471	Prob Z_{Tau}	0.0699

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0233	AR(1) coefficient	-0.7012
Standard error	0.0468	Standard error	0.1029
t-statistic	-0.4985	t-statistic	-6.8142
Probability t	0.6204	Durbin-Watson	2.1745

Estimated incremental annual growth rate: (0.093%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

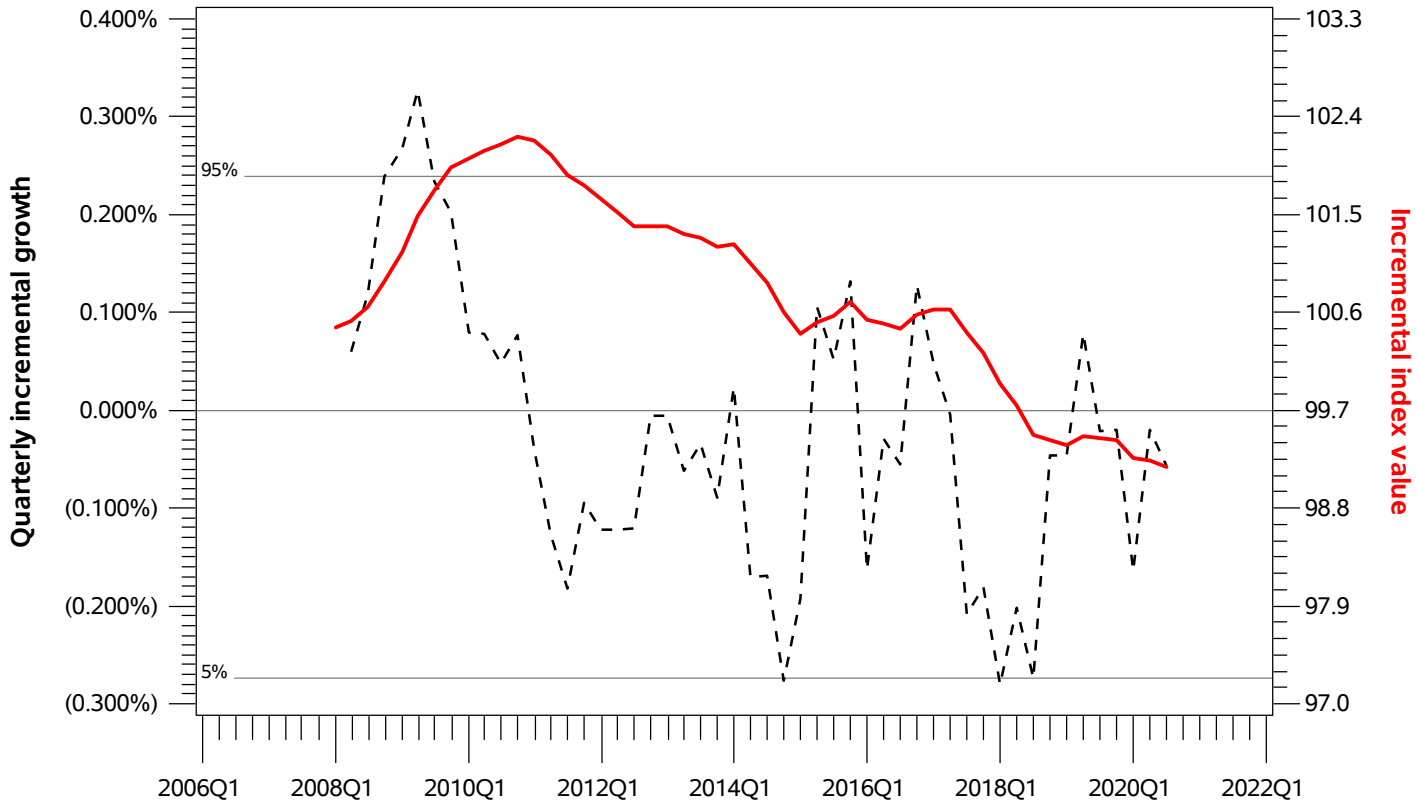


Table 34. ECI: COMP(PRIV) Nursing and residential care facilities incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20162300000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-11.4647	Z_{Tau}	-2.4556
Prob Z_{Rho}	0.0773	Prob Z_{Tau}	0.1321

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0687	AR(1) coefficient	-0.7791
Standard error	0.0495	Standard error	0.0905
t-statistic	-1.3878	t-statistic	-8.6089
Probability t	0.1716	Durbin-Watson	1.7260

Estimated incremental annual growth rate: (0.274%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

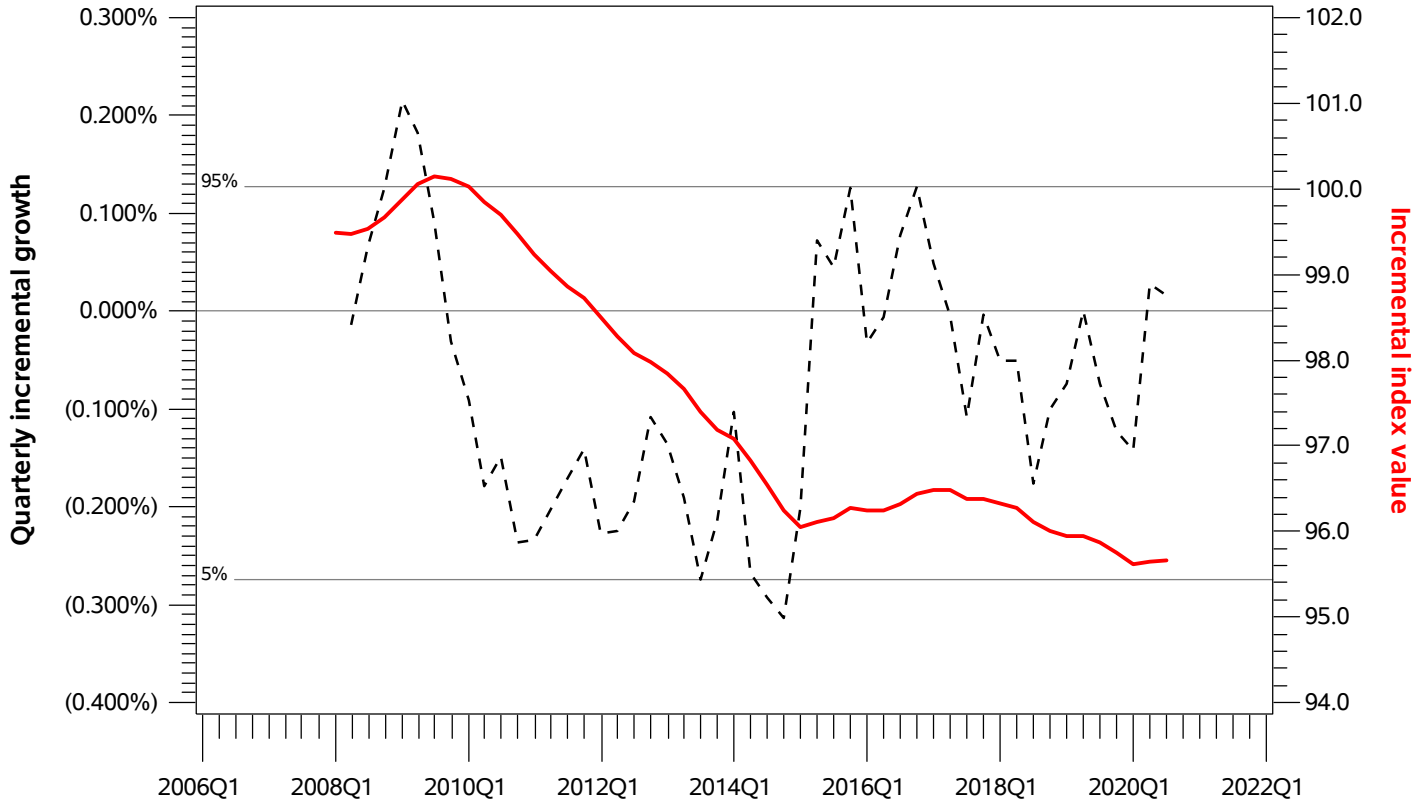


Table 35. ECI: COMP(PRIV) Leisure and hospitality incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20170000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-7.7585	Z_{Tau}	-1.9918
Prob Z_{Rho}	0.2098	Prob Z_{Tau}	0.2895

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0142	AR(1) coefficient	-0.8080
Standard error	0.0918	Standard error	0.0850
t-statistic	0.1550	t-statistic	-9.5010
Probability t	0.8775	Durbin-Watson	2.2313

Estimated incremental annual growth rate: 0.057%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

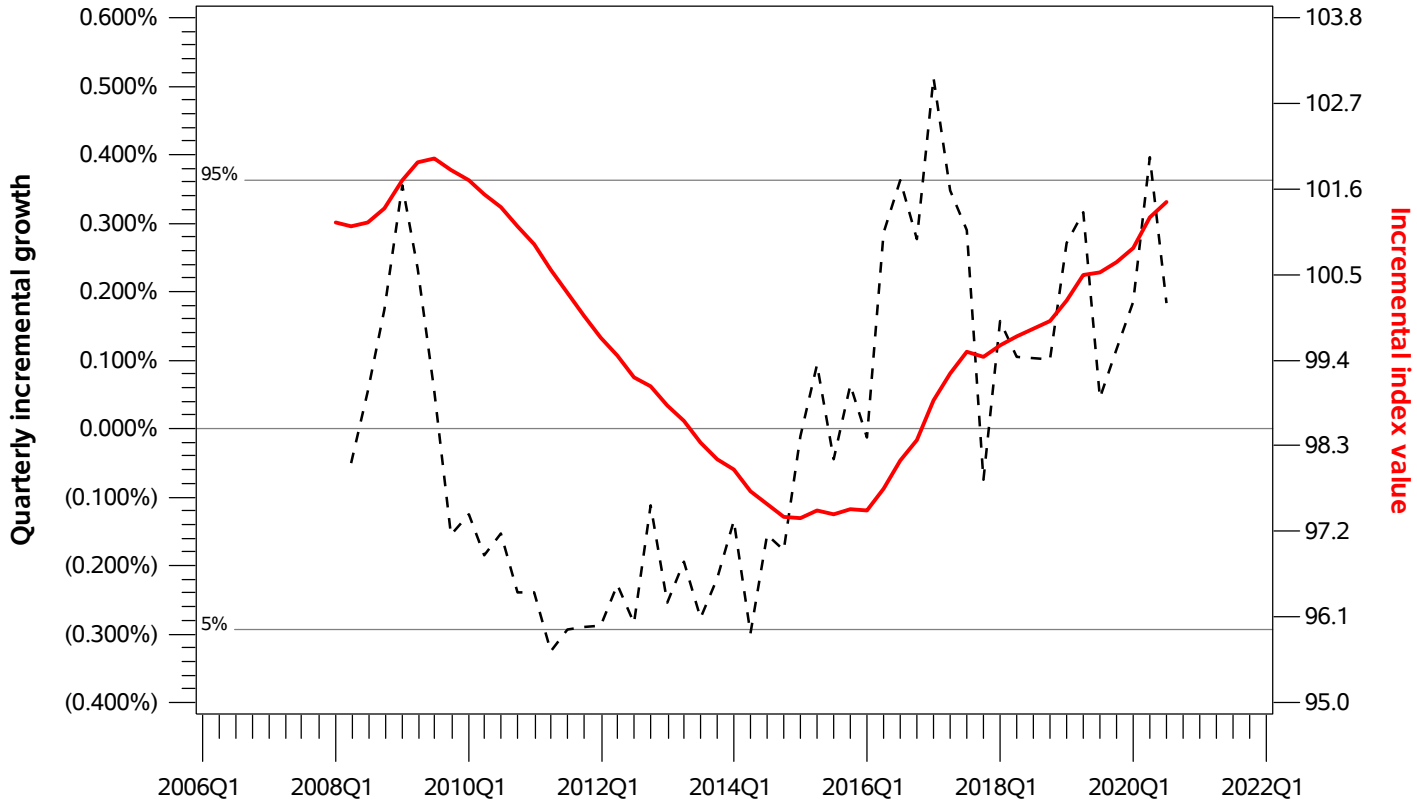


Table 36. ECI: COMP(PRIV) Accommodations and food service incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20172000000000I and CIS201S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-6.7523	Z_{Tau}	-1.8289
Prob Z_{Rho}	0.2719	Prob Z_{Tau}	0.3628

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0467	AR(1) coefficient	-0.8314
Standard error	0.1120	Standard error	0.0802
t-statistic	0.4168	t-statistic	-10.3644
Probability t	0.6787	Durbin-Watson	2.1874

Estimated incremental annual growth rate: 0.187%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

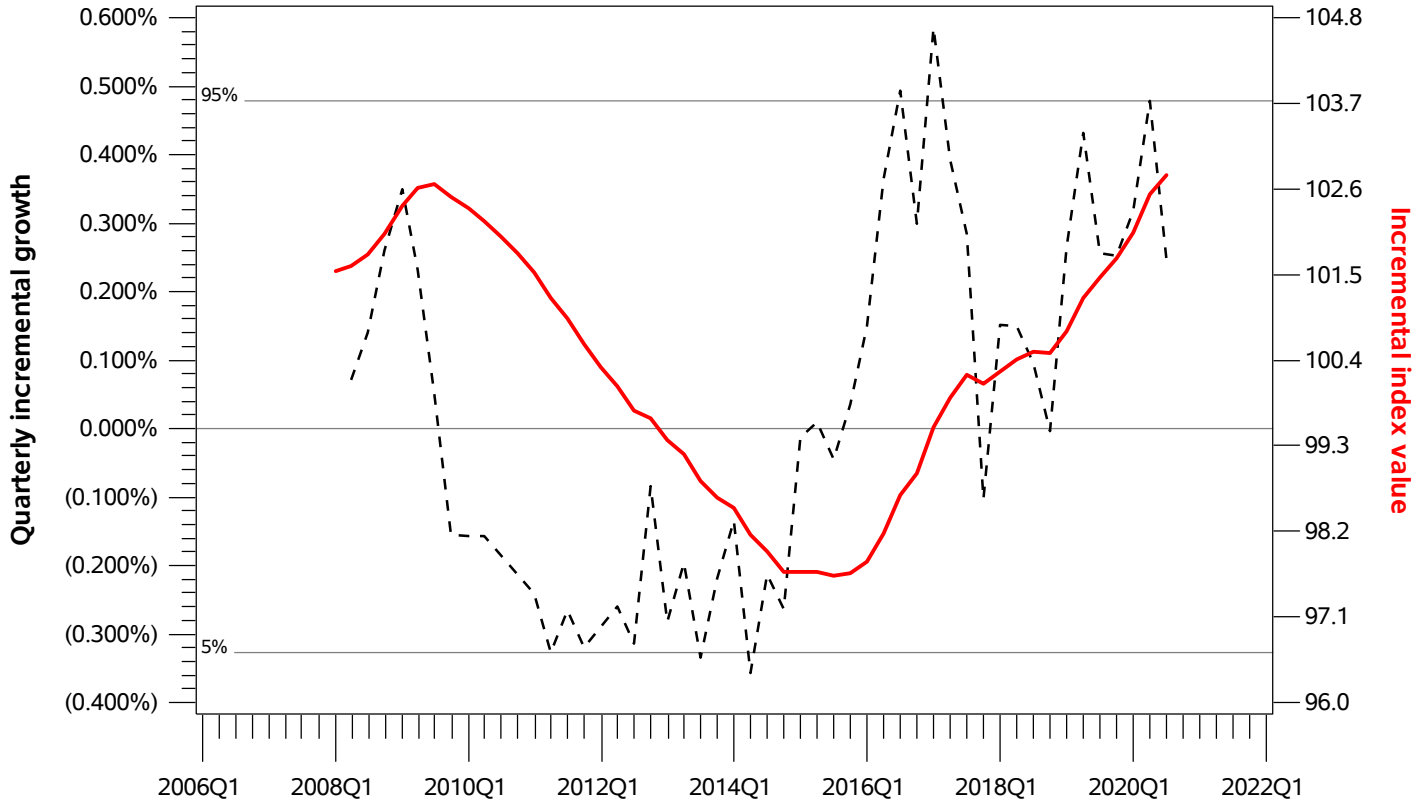


Table 37. ECI: COMP(PRIV) Other services, except public administration incremental growth over ECI: COMP(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20181000000000I and CIS201S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-30.5200	Z_{Tau}	-4.3846
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0009

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0149	AR(1) coefficient	-0.4557
Standard error	0.0360	Standard error	0.1285
t-statistic	-0.4147	t-statistic	-3.5464
Probability t	0.6802	Durbin-Watson	1.5866

Estimated incremental annual growth rate: (0.060%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

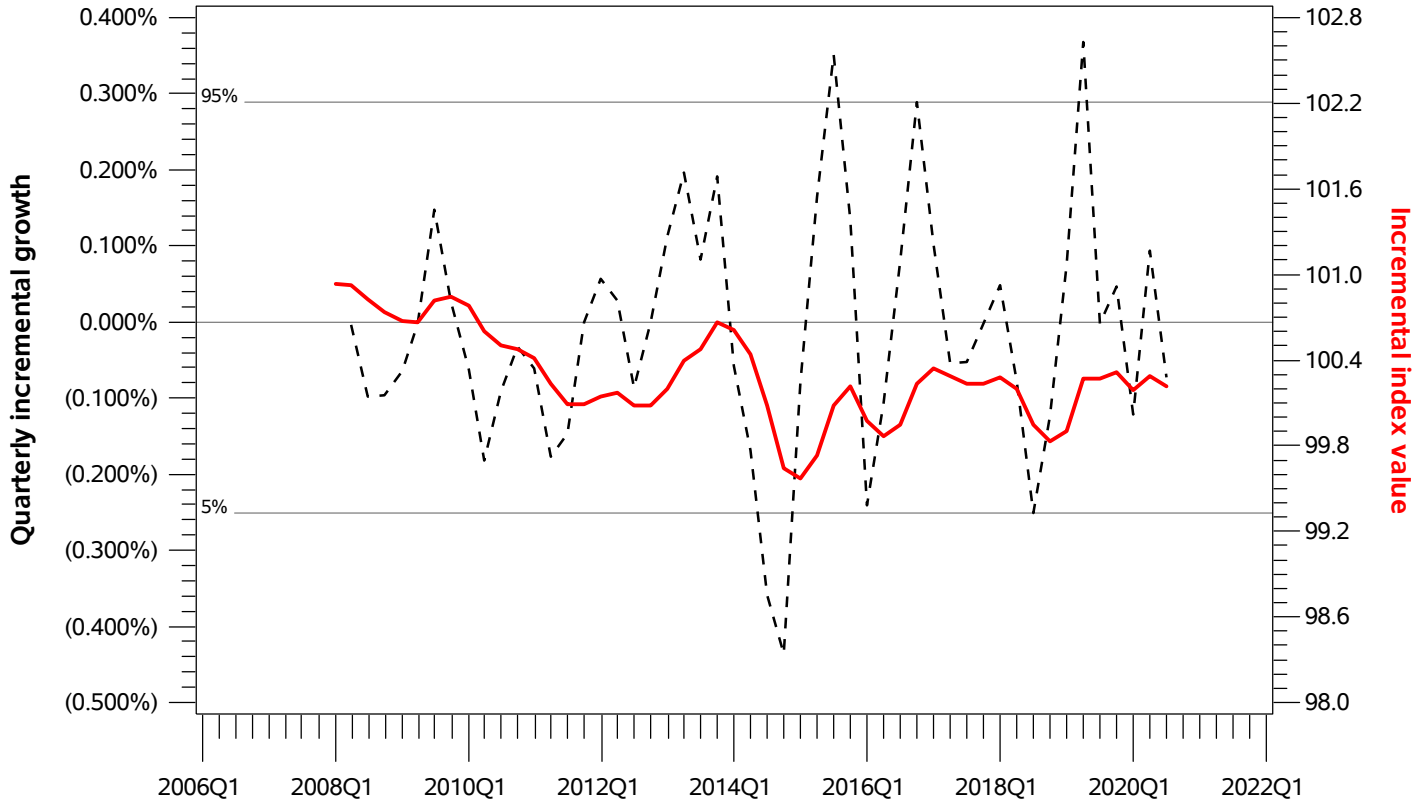


Table 38. ECI: W&S(PRIV) Management, professional, and related incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200001000001 and CIS20200000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.2186	Z_{Tau}	-3.2294
Prob Z_{Rho}	0.0106	Prob Z_{Tau}	0.0238

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0324	AR(1) coefficient	-0.6613
Standard error	0.0271	Standard error	0.1083
t-statistic	-1.1961	t-statistic	-6.1080
Probability t	0.2375	Durbin-Watson	1.6760

Estimated incremental annual growth rate: (0.129%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

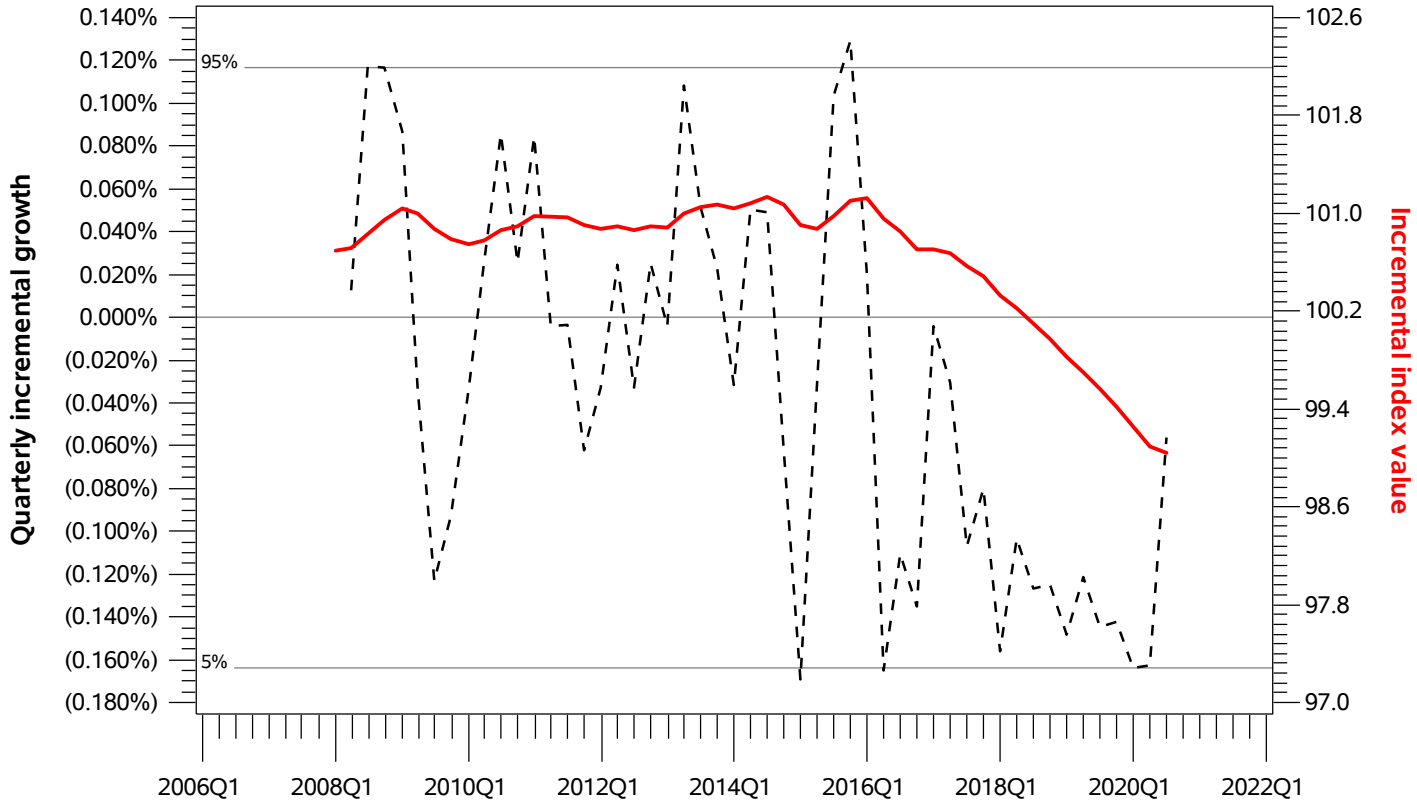


Table 39. ECI: W&S(PRIV) Management, business, and financial incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200001100001 and CIS20200000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-27.0029	Z_{Tau}	-4.0185
Prob Z_{Rho}	0.0006	Prob Z_{Tau}	0.0027

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0019	AR(1) coefficient	-0.5379
Standard error	0.0337	Standard error	0.1217
t-statistic	-0.0548	t-statistic	-4.4208
Probability t	0.9565	Durbin-Watson	1.4532

Estimated incremental annual growth rate: (0.007%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

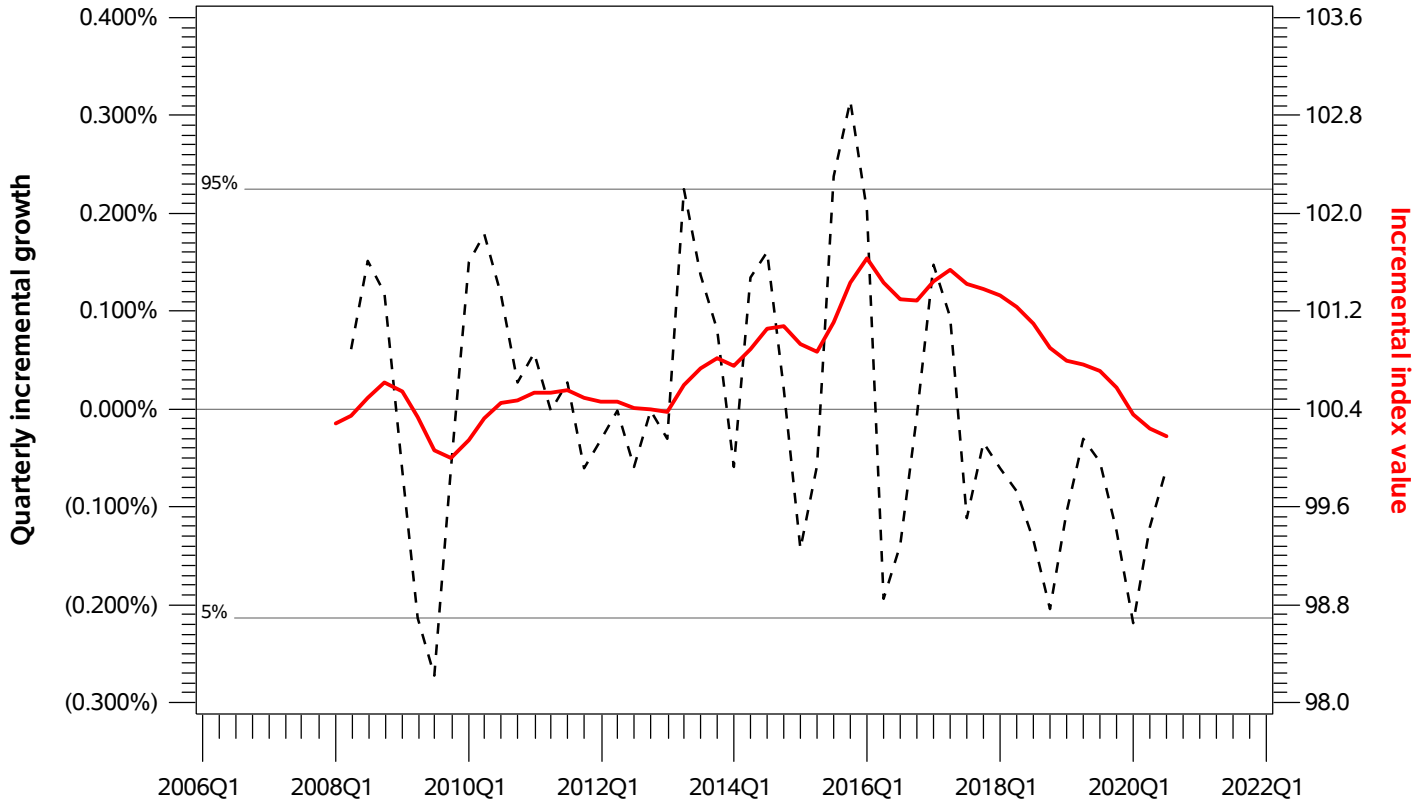


Table 40. ECI: W&S(PRIV) Professional and related incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200001200001 and CIS20200000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-13.7618	Z_{Tau}	-2.8168
Prob Z_{Rho}	0.0404	Prob Z_{Tau}	0.0630

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0524	AR(1) coefficient	-0.7130
Standard error	0.0332	Standard error	0.1012
t-statistic	-1.5795	t-statistic	-7.0453
Probability t	0.1208	Durbin-Watson	1.9263

Estimated incremental annual growth rate: (0.210%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

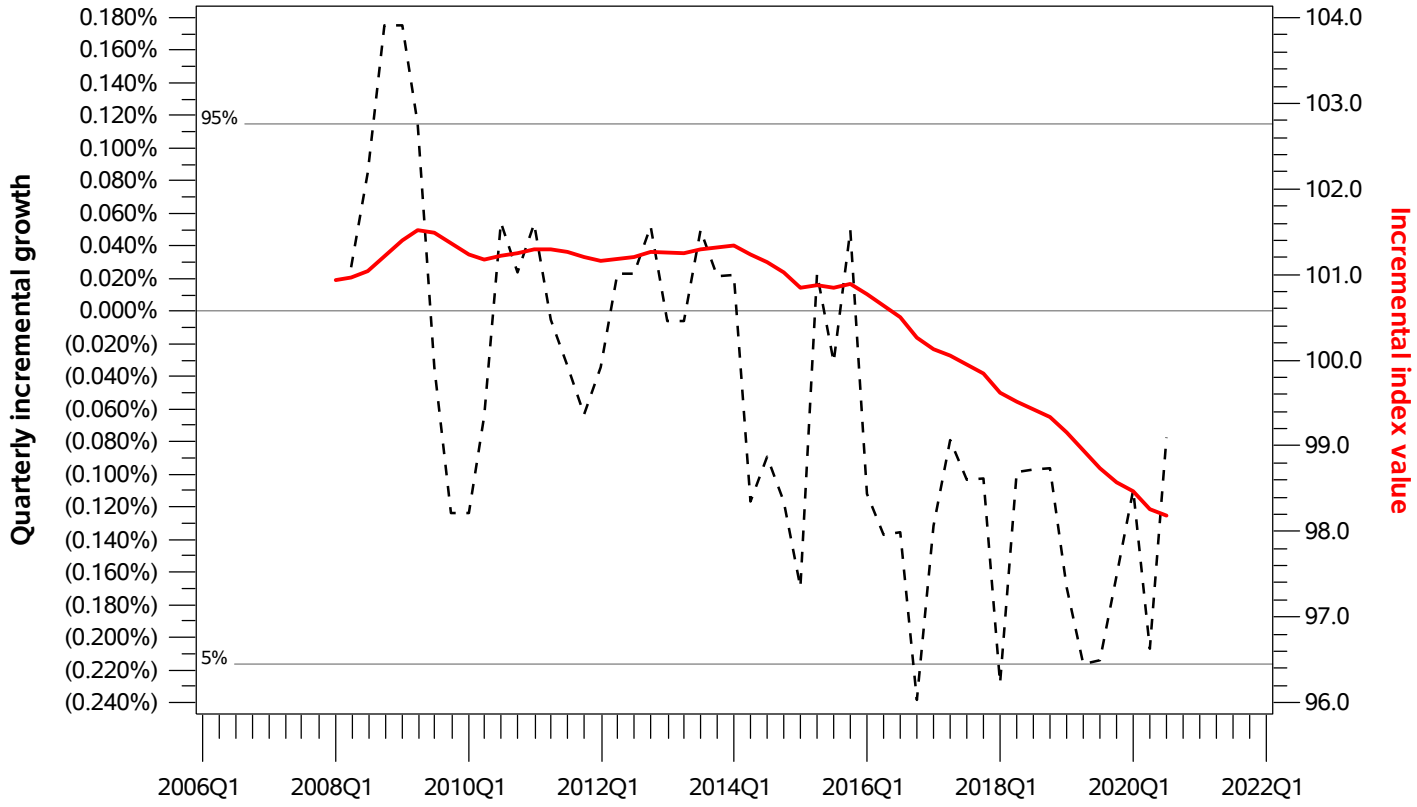


Table 41. ECI: W&S(PRIV) Sales and office incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200002000001 and CIS20200000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-23.5008	Z_{Tau}	-3.8158
Prob Z_{Rho}	0.0020	Prob Z_{Tau}	0.0049

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0266	AR(1) coefficient	-0.5439
Standard error	0.0330	Standard error	0.1211
t-statistic	0.8080	t-statistic	-4.4904
Probability t	0.4231	Durbin-Watson	1.7490

Estimated incremental annual growth rate: 0.107%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

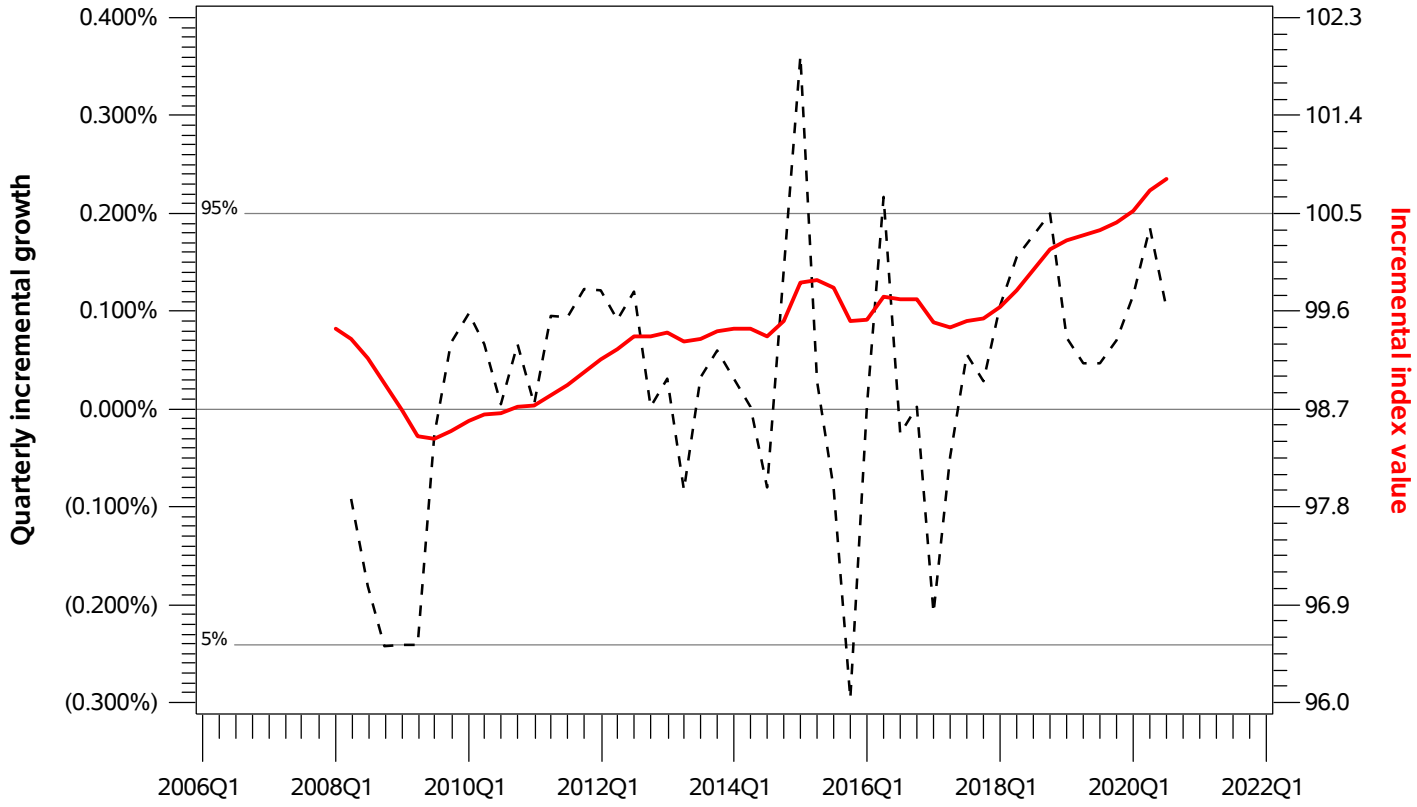


Table 42. ECI: W&S(PRIV) Sales and related incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200002100001 and CIS20200000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.7876	Z_{Tau}	-3.4678
Prob Z_{Rho}	0.0047	Prob Z_{Tau}	0.0128

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0114	AR(1) coefficient	-0.6040
Standard error	0.1020	Standard error	0.1150
t-statistic	0.1117	t-statistic	-5.2505
Probability t	0.9115	Durbin-Watson	1.7348

Estimated incremental annual growth rate: 0.046%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

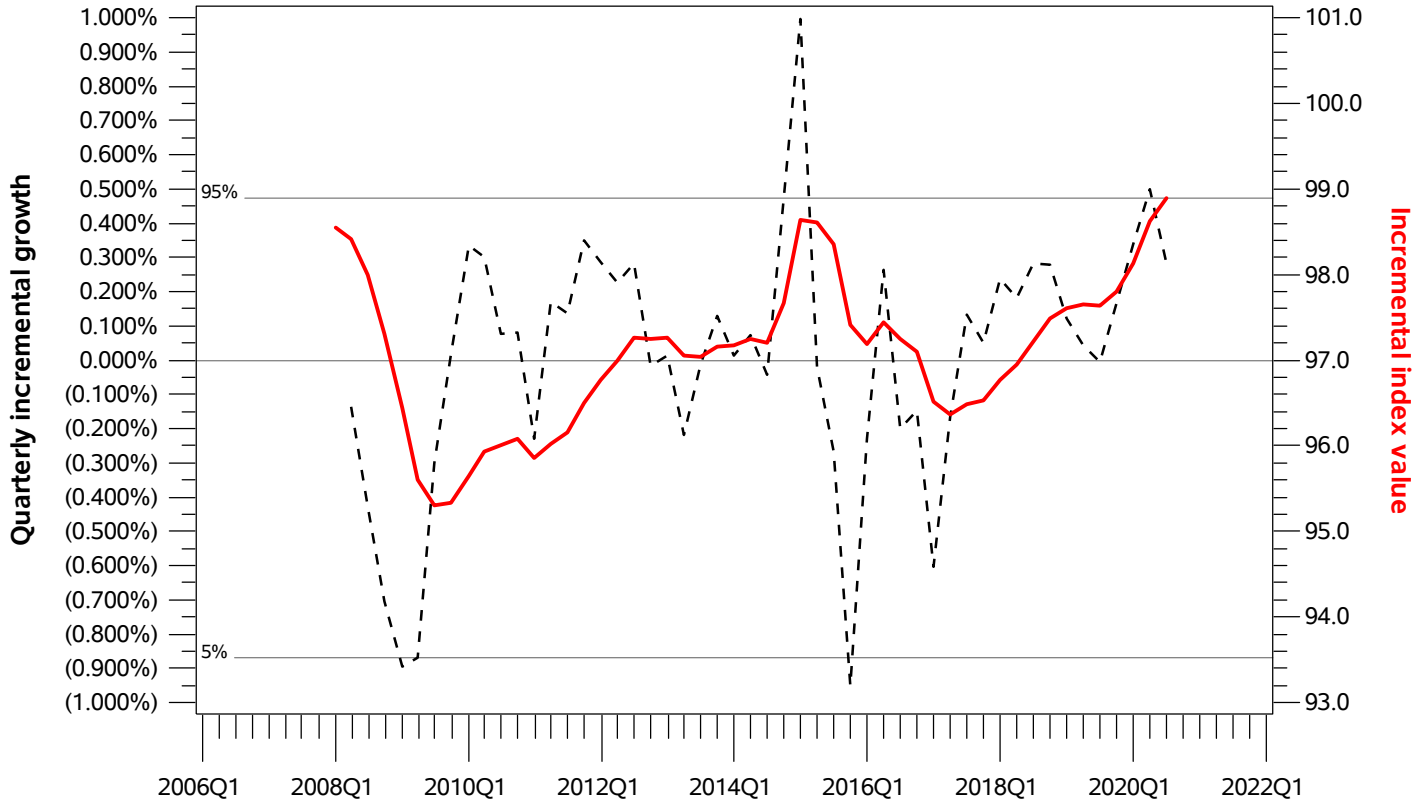


Table 43. ECI: W&S(PRIV) Office and administrative support incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200002200001 and CIS20200000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.0645	Z_{Tau}	-3.3317
Prob Z_{Rho}	0.0082	Prob Z_{Tau}	0.0183

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0398	AR(1) coefficient	-0.5932
Standard error	0.0248	Standard error	0.1162
t-statistic	1.6039	t-statistic	-5.1053
Probability t	0.1153	Durbin-Watson	1.9757

Estimated incremental annual growth rate: 0.159%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

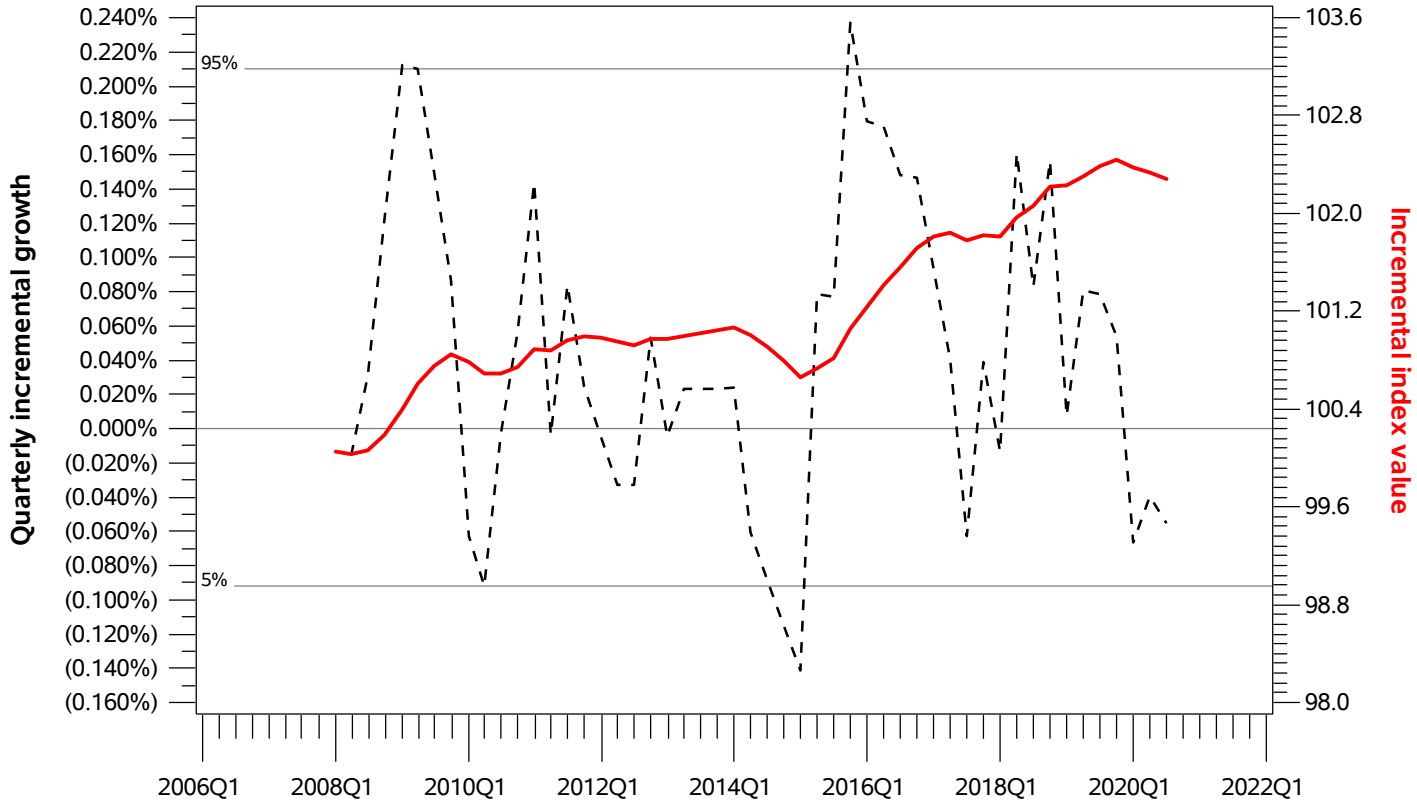


Table 44. ECI: W&S(PRIV) Service occupations incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200003000001 and CIS20200000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-8.4359	Z_{Tau}	-2.1184
Prob Z_{Rho}	0.1756	Prob Z_{Tau}	0.2385

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0449	AR(1) coefficient	-0.8125
Standard error	0.0664	Standard error	0.0841
t-statistic	0.6755	t-statistic	-9.6576
Probability t	0.5026	Durbin-Watson	2.0828

Estimated incremental annual growth rate: 0.180%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

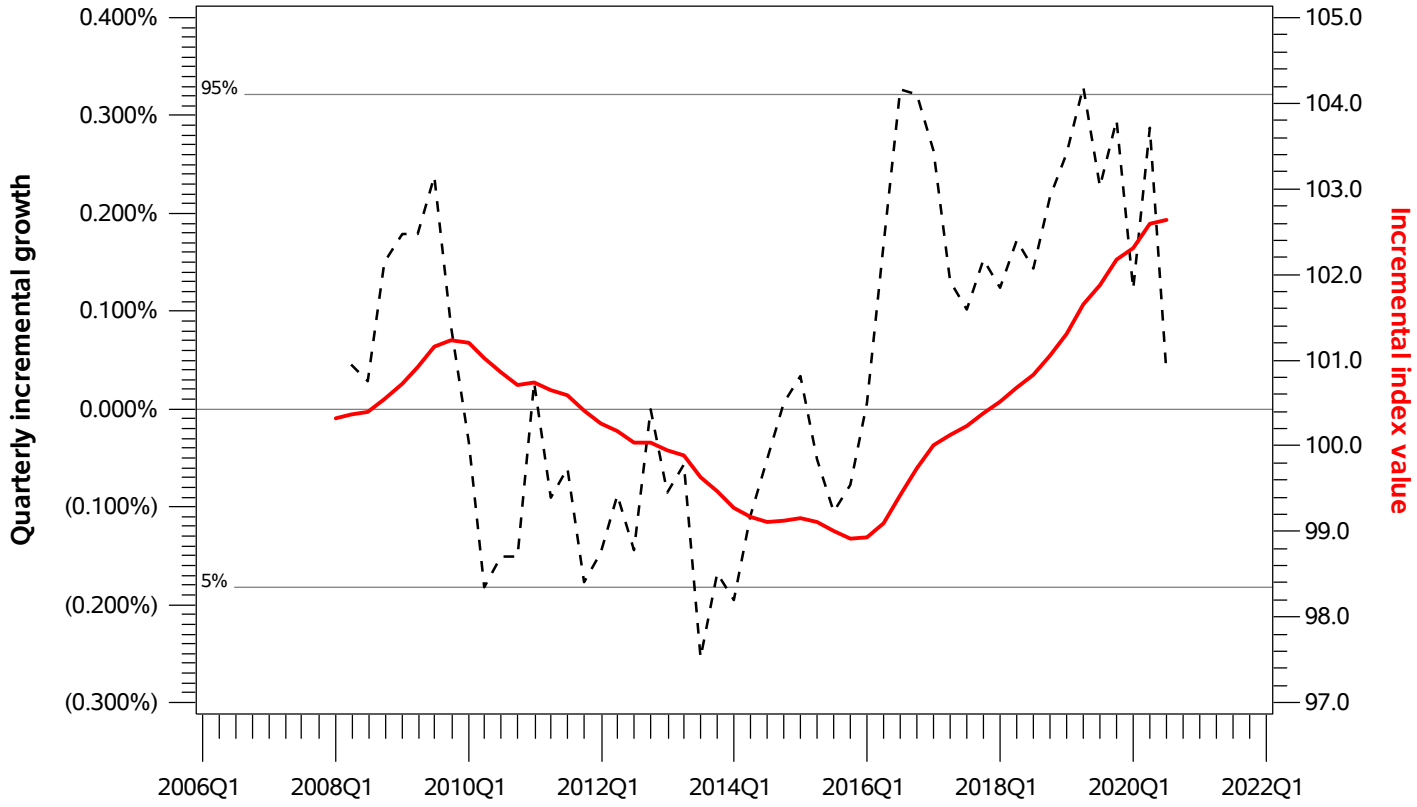


Table 45. ECI: W&S(PRIV) Natural resources, construction, and maintenance incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200004000001 and CIS20200000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.4514	Z_{Tau}	-3.6044
Prob Z_{Rho}	0.0038	Prob Z_{Tau}	0.0088

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0244	AR(1) coefficient	-0.5473
Standard error	0.0269	Standard error	0.1208
t-statistic	-0.9076	t-statistic	-4.5300
Probability t	0.3686	Durbin-Watson	1.9909

Estimated incremental annual growth rate: (0.098%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

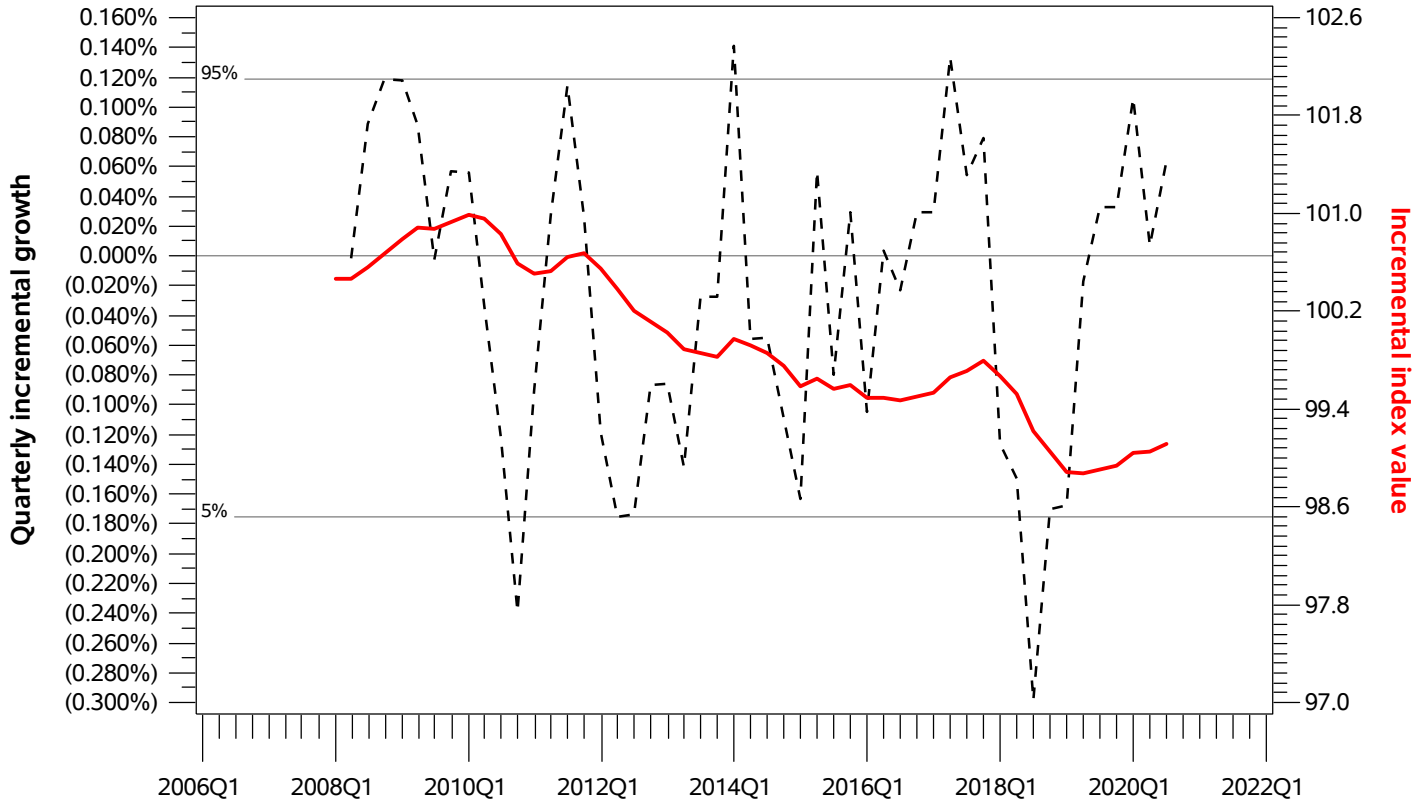


Table 46. ECI: W&S(PRIV) Construction, extraction, farming, fishing, and forestry occupations incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200004050001 and CIS20200000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.8331	Z_{Tau}	-3.5516
Prob Z_{Rho}	0.0088	Prob Z_{Tau}	0.0102

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0335	AR(1) coefficient	-0.5499
Standard error	0.0305	Standard error	0.1206
t-statistic	-1.0986	t-statistic	-4.5614
Probability t	0.2774	Durbin-Watson	2.2416

Estimated incremental annual growth rate: (0.134%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

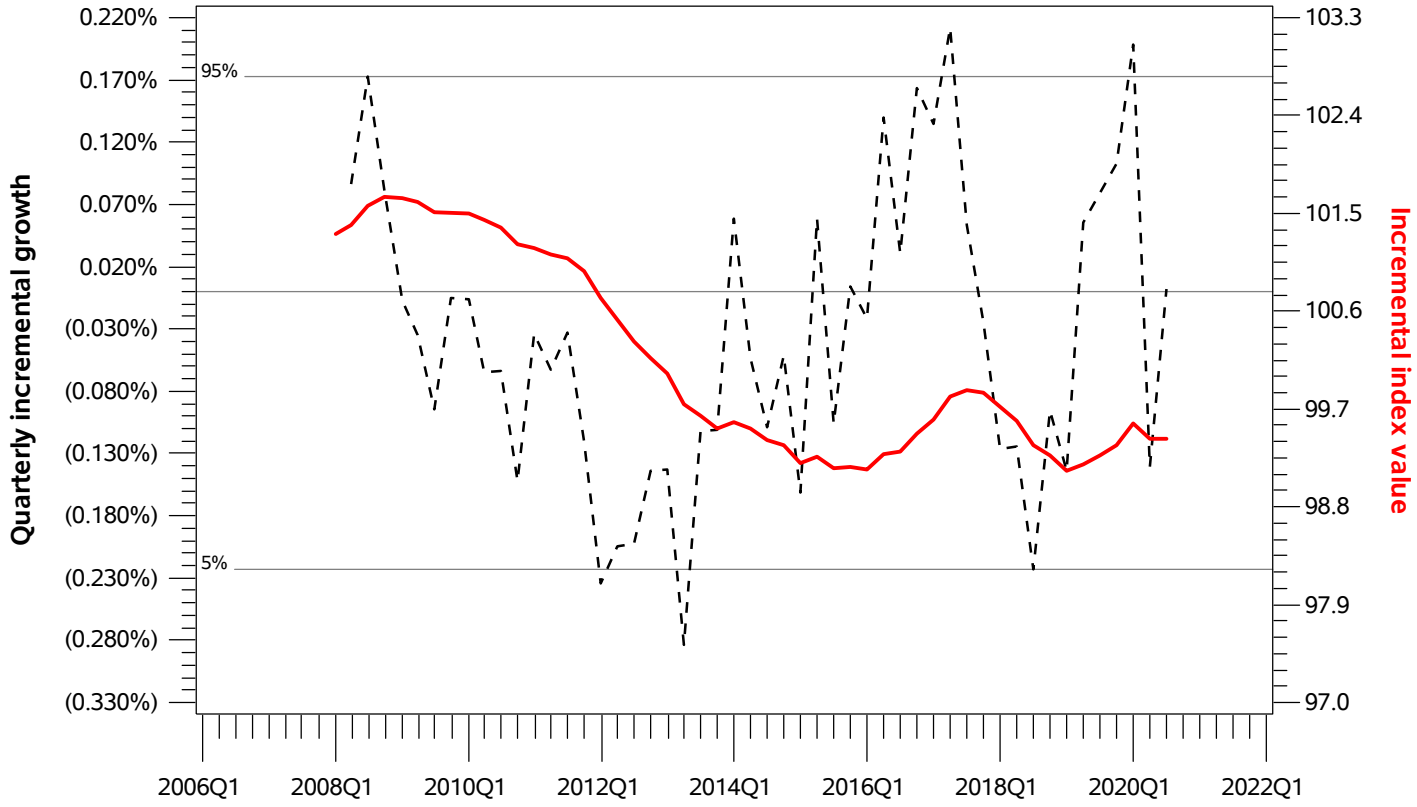


Table 47. ECI: W&S(PRIV) Installation, maintenance, and repair incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200004300001 and CIS20200000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.4429	Z_{Tau}	-3.5861
Prob Z_{Rho}	0.0028	Prob Z_{Tau}	0.0093

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0098	AR(1) coefficient	-0.5994
Standard error	0.0430	Standard error	0.1155
t-statistic	-0.2273	t-statistic	-5.1880
Probability t	0.8212	Durbin-Watson	1.5928

Estimated incremental annual growth rate: (0.039%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

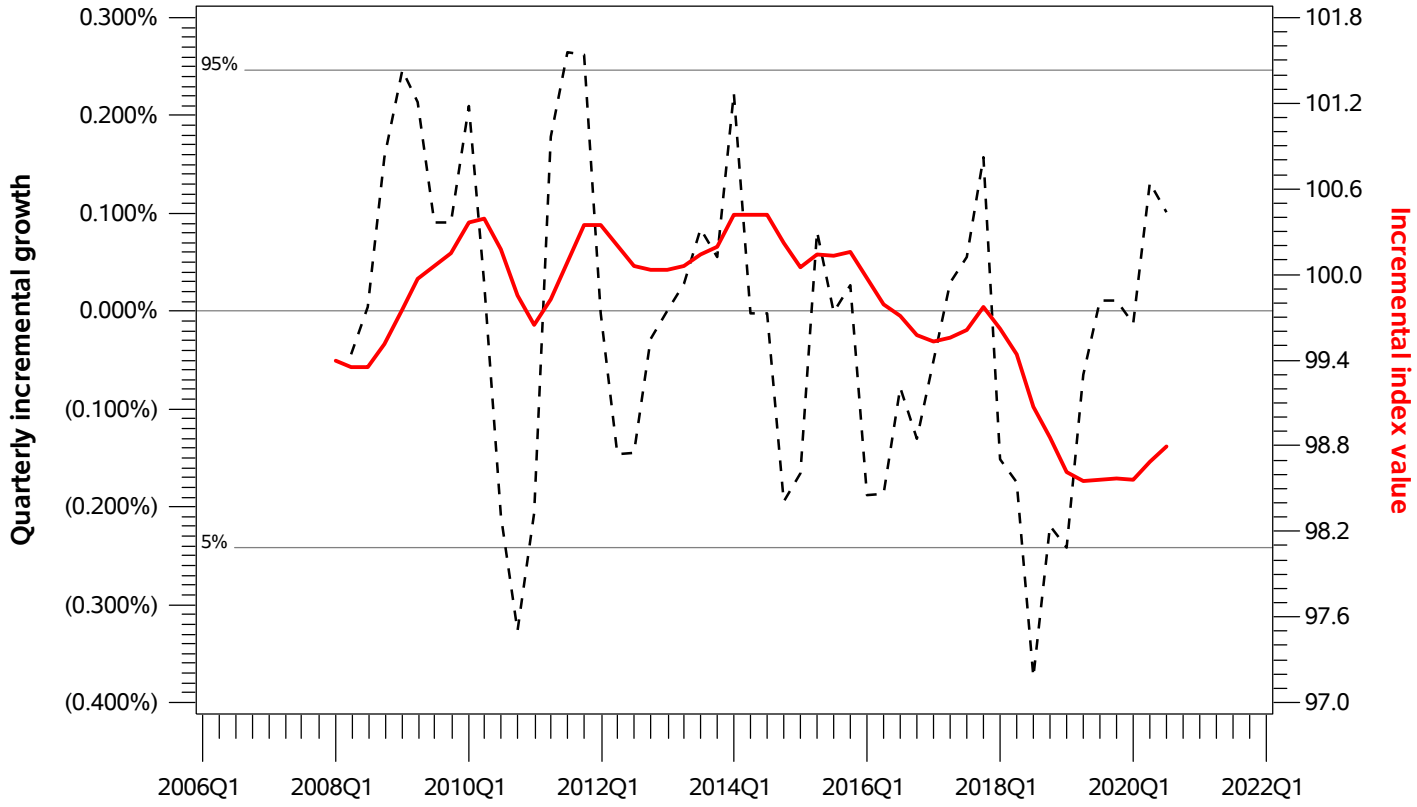


Table 48. ECI: W&S(PRIV) Production, transportation, and material moving incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200005000001 and CIS20200000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.2063	Z_{Tau}	-3.5102
Prob Z_{Rho}	0.0057	Prob Z_{Tau}	0.0114

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0555	AR(1) coefficient	-0.5660
Standard error	0.0245	Standard error	0.1190
t-statistic	2.2663	t-statistic	-4.7560
Probability t	0.0280	Durbin-Watson	1.9765

Estimated incremental annual growth rate: 0.222%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.222%

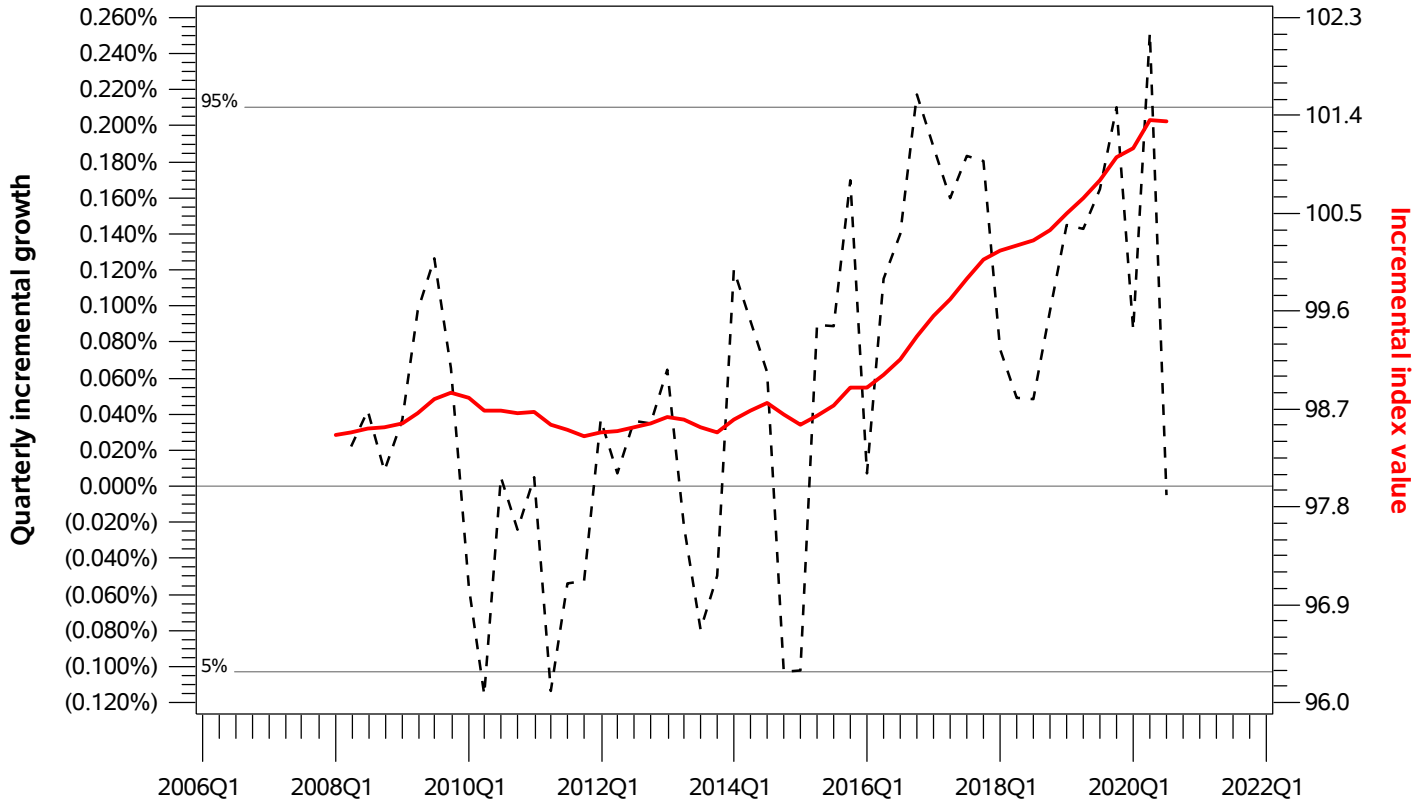


Table 49. ECI: W&S(PRIV) Production incremental growth over ECI: W&S(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20200005100001 and CIS20200000000001

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-23.4519	Z_{Tau}	-3.9006
Prob Z_{Rho}	0.0020	Prob Z_{Tau}	0.0038

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0181	AR(1) coefficient	-0.4994
Standard error	0.0183	Standard error	0.1250
t-statistic	0.9893	t-statistic	-3.9940
Probability t	0.3275	Durbin-Watson	2.0966

Estimated incremental annual growth rate: 0.073%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

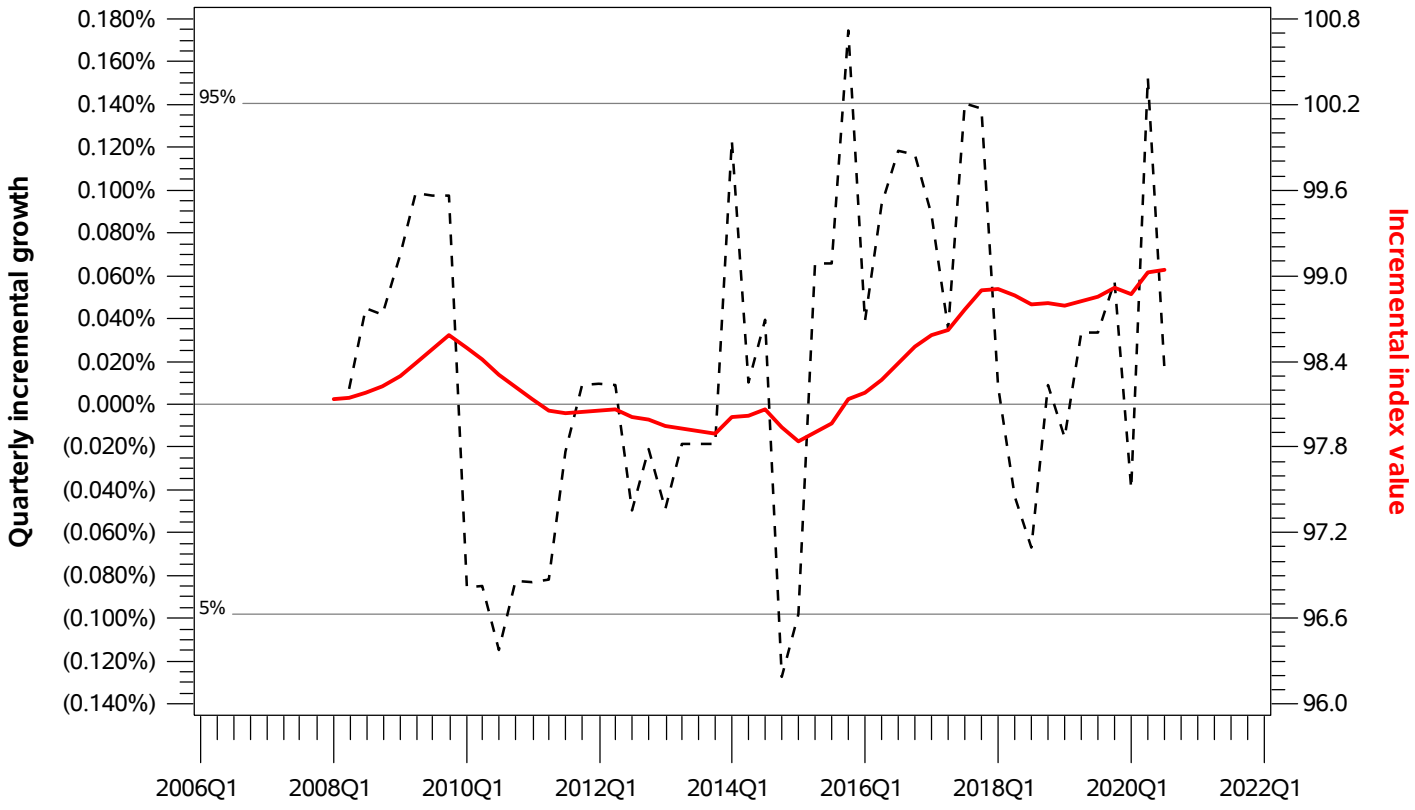


Table 50. ECI: W&S(PRIV) Transportation and material moving incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20200005200001 and CIS202S0000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.8221	Z_{Tau}	-3.4430
Prob Z_{Rho}	0.0064	Prob Z_{Tau}	0.0137

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0910	AR(1) coefficient	-0.5848
Standard error	0.0400	Standard error	0.1171
t-statistic	2.2784	t-statistic	-4.9948
Probability t	0.0272	Durbin-Watson	1.9061

Estimated incremental annual growth rate: 0.365%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.365%

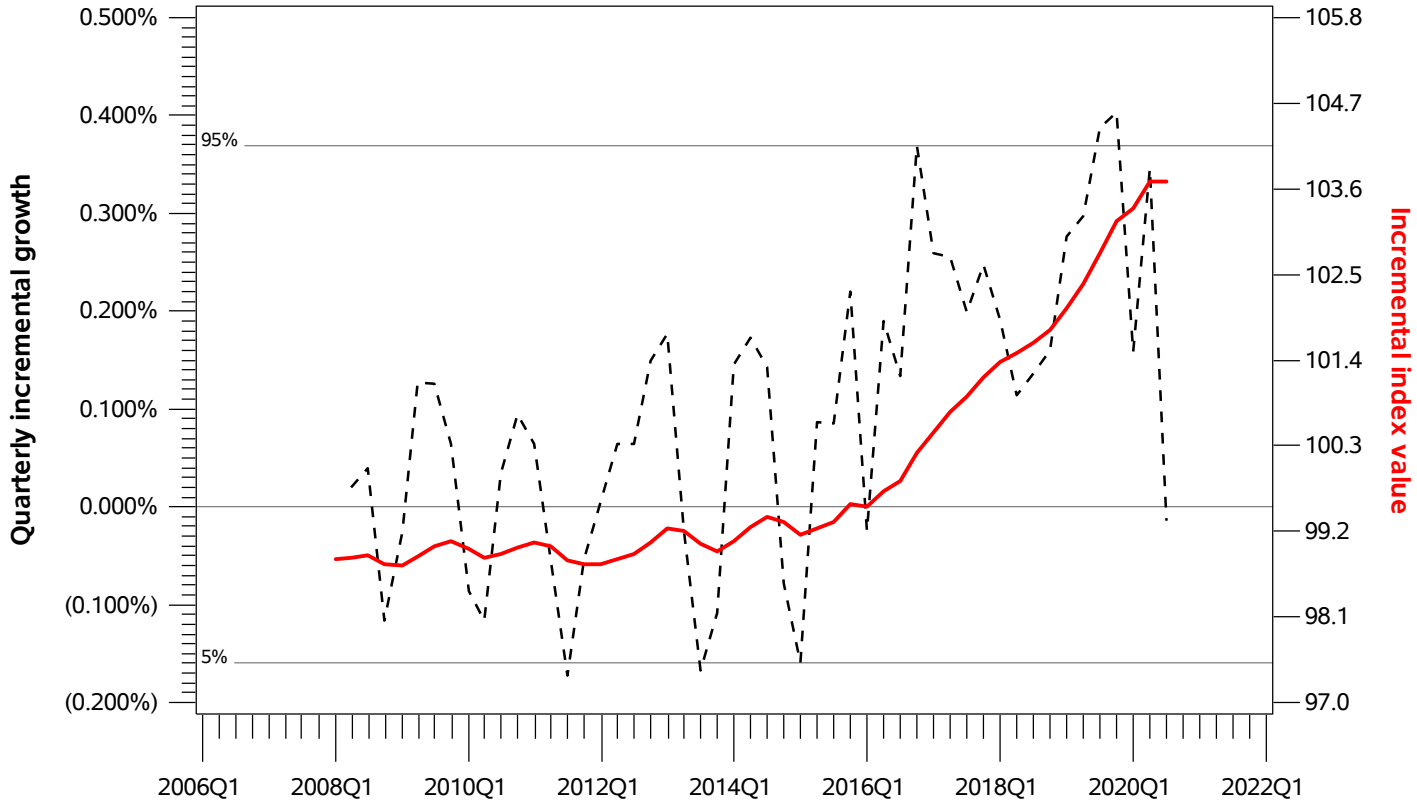


Table 51. ECI: W&S(PRIV) Construction incremental growth over ECI: W&S(PRIV) Goods-producing industries

LABSTAT series identifiers: CIS20223000000000I and CIS202G000000000I

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-16.9754	Z_{Tau}	-3.1766
Prob Z_{Rho}	0.0156	Prob Z_{Tau}	0.0272

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0269	AR(1) coefficient	-0.6359
Standard error	0.0311	Standard error	0.1114
t-statistic	-0.8649	t-statistic	-5.7090
Probability t	0.3914	Durbin-Watson	1.9968

Estimated incremental annual growth rate: (0.108%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

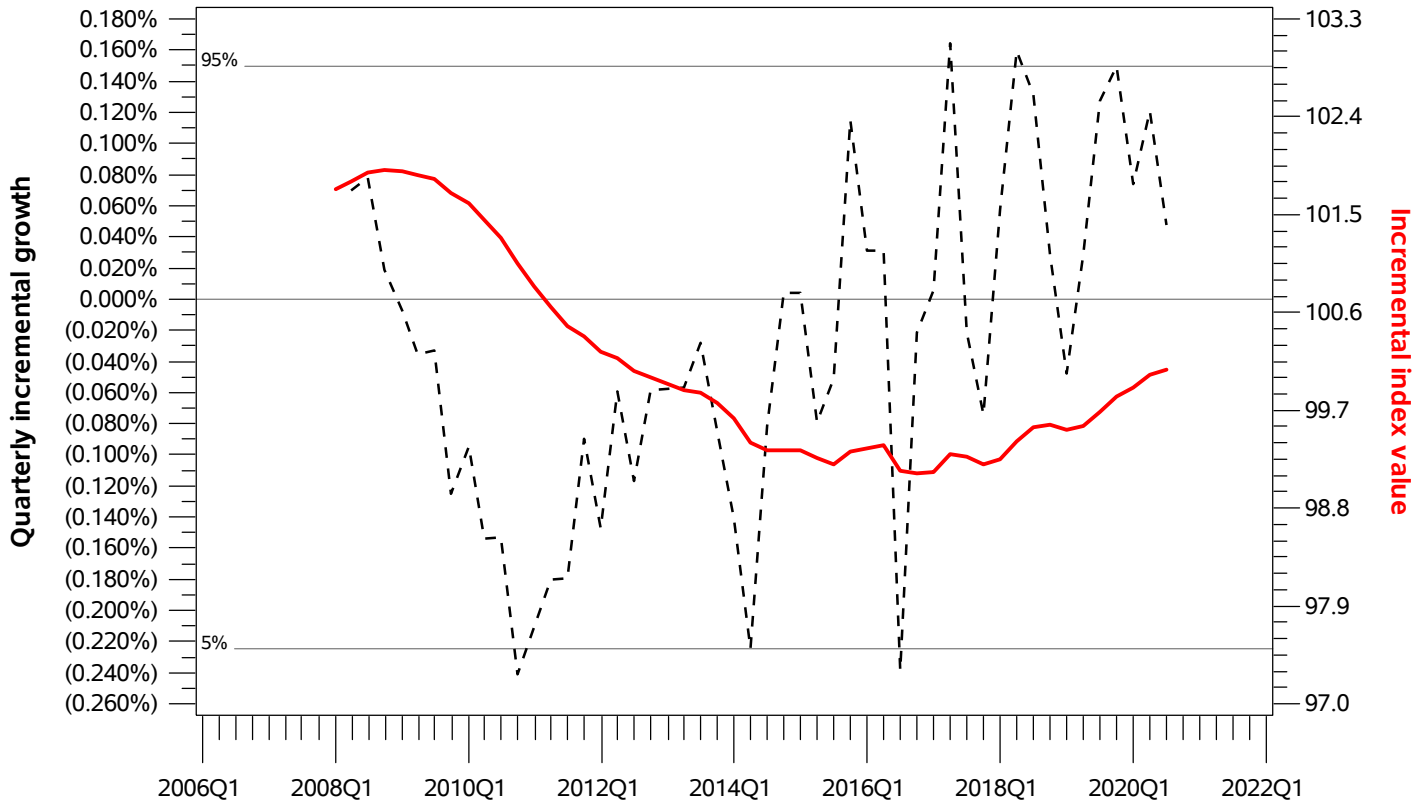


Table 52. ECI: W&S(PRIV) Aircraft manufacturing incremental growth over ECI: W&S(PRIV) Manufacturing

LABSTAT series identifiers: CIS20232110000000I and CIS20230000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-5.8350	Z_{Tau}	-1.6391
Prob Z_{Rho}	0.3419	Prob Z_{Tau}	0.4557

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0598	AR(1) coefficient	-0.8463
Standard error	0.0990	Standard error	0.0769
t-statistic	0.6039	t-statistic	-11.0055
Probability t	0.5488	Durbin-Watson	2.0775

Estimated incremental annual growth rate: 0.239%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

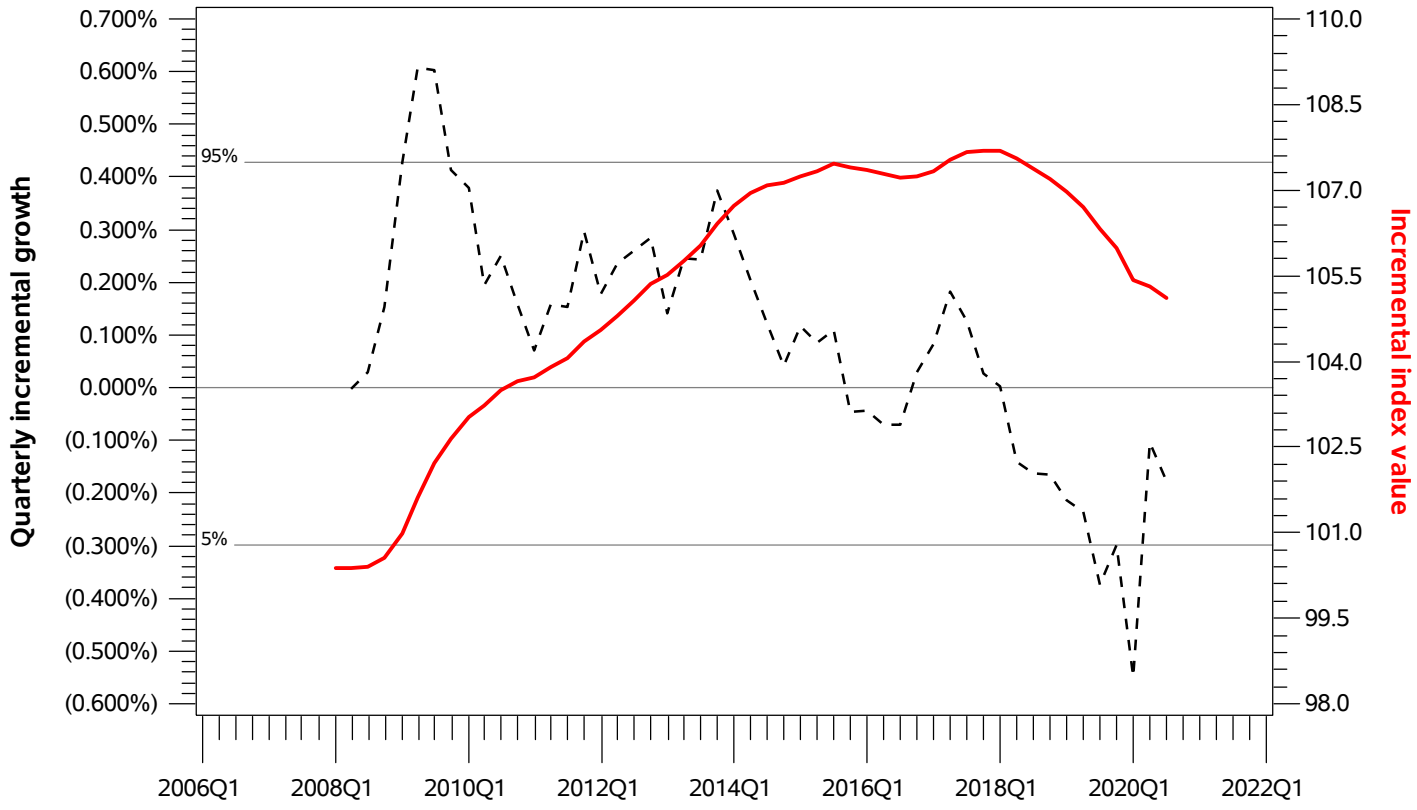


Table 53. ECI: W&S(PRIV) Trade, transportation, and utilities incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20240000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-23.9520	Z_{Tau}	-3.8169
Prob Z_{Rho}	0.0017	Prob Z_{Tau}	0.0049

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0479	AR(1) coefficient	-0.5471
Standard error	0.0272	Standard error	0.1208
t-statistic	1.7611	t-statistic	-4.5280
Probability t	0.0846	Durbin-Watson	1.7865

Estimated incremental annual growth rate: 0.192%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.192%

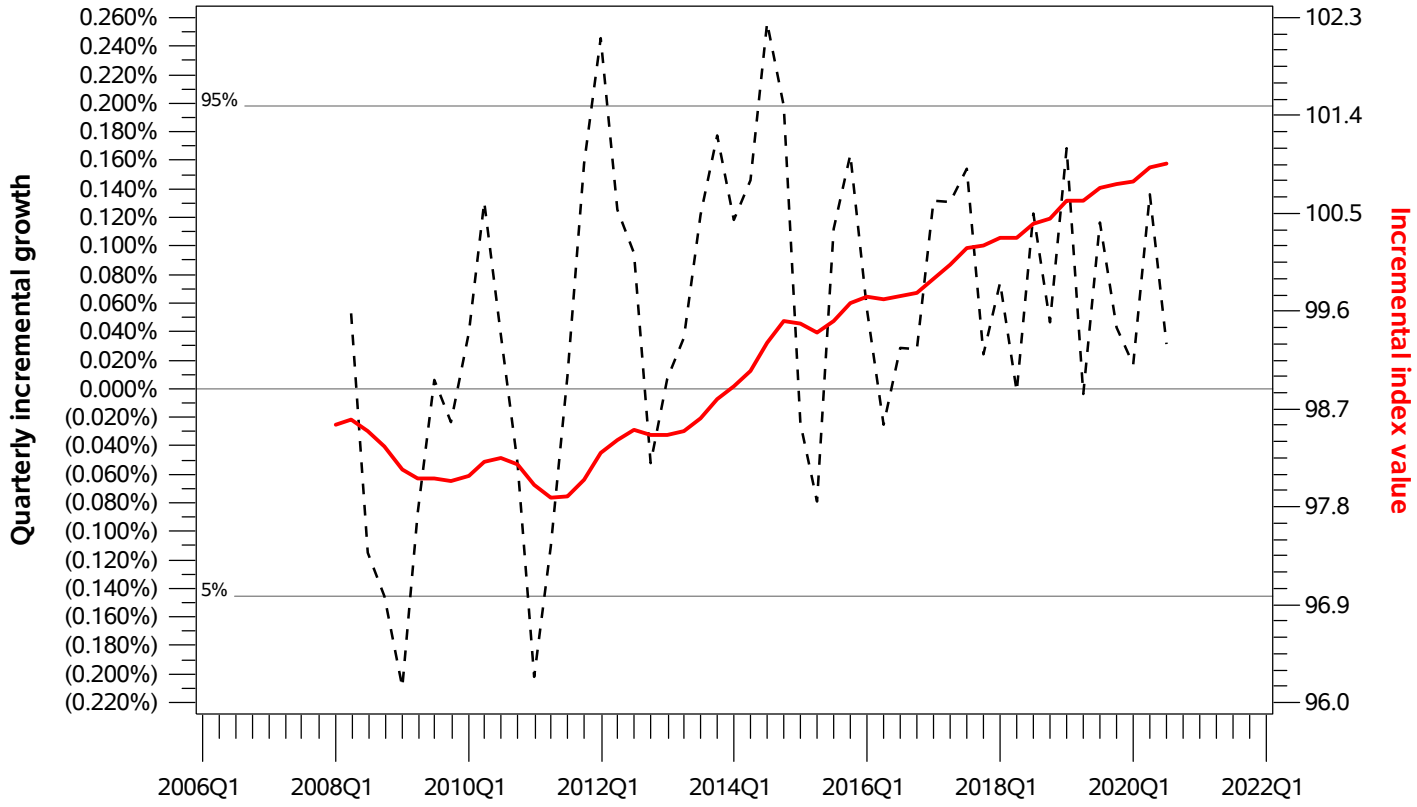


Table 54. ECI: W&S(PRIV) Retail trade incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20241200000000I and CIS202S000000000I

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.3374	Z_{Tau}	-3.1817
Prob Z_{Rho}	0.0103	Prob Z_{Tau}	0.0268

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0616	AR(1) coefficient	-0.6814
Standard error	0.0512	Standard error	0.1056
t-statistic	1.2018	t-statistic	-6.4495
Probability t	0.2353	Durbin-Watson	1.4198

Estimated incremental annual growth rate: 0.246%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

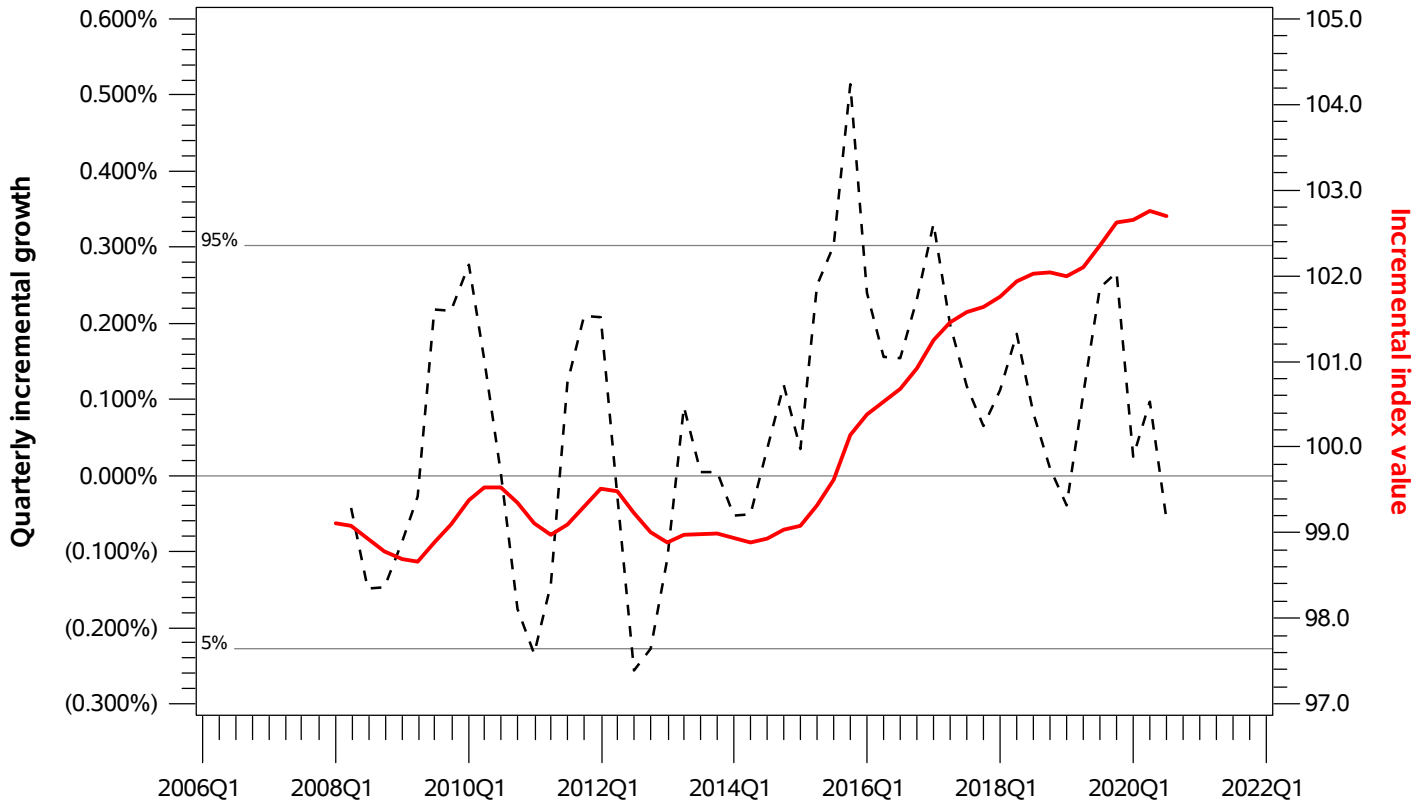


Table 55. ECI: W&S(PRIV) Transportation and warehousing incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20243000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.2324	Z_{Tau}	-3.6746
Prob Z_{Rho}	0.0030	Prob Z_{Tau}	0.0073

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.1268	AR(1) coefficient	-0.5698
Standard error	0.0450	Standard error	0.1186
t-statistic	2.8196	t-statistic	-4.8034
Probability t	0.0070	Durbin-Watson	1.6937

Estimated incremental annual growth rate: 0.508%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.508%

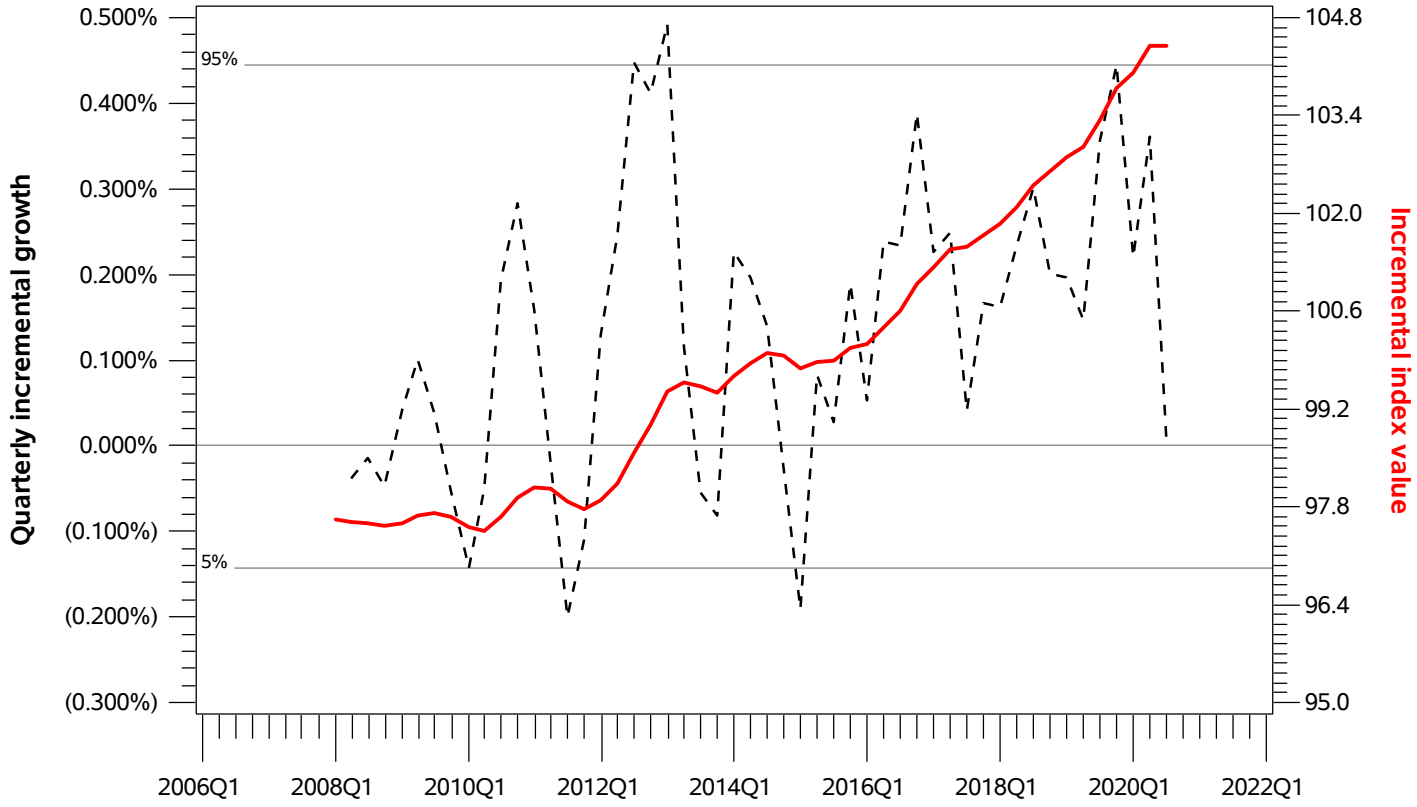


Table 56. ECI: W&S(PRIV) Utilities incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20244000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-14.2333	Z_{Tau}	-2.6833
Prob Z_{Rho}	0.0353	Prob Z_{Tau}	0.0838

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0685	AR(1) coefficient	-0.6573
Standard error	0.0558	Standard error	0.1088
t-statistic	1.2268	t-statistic	-6.0431
Probability t	0.2259	Durbin-Watson	1.9674

Estimated incremental annual growth rate: 0.274%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

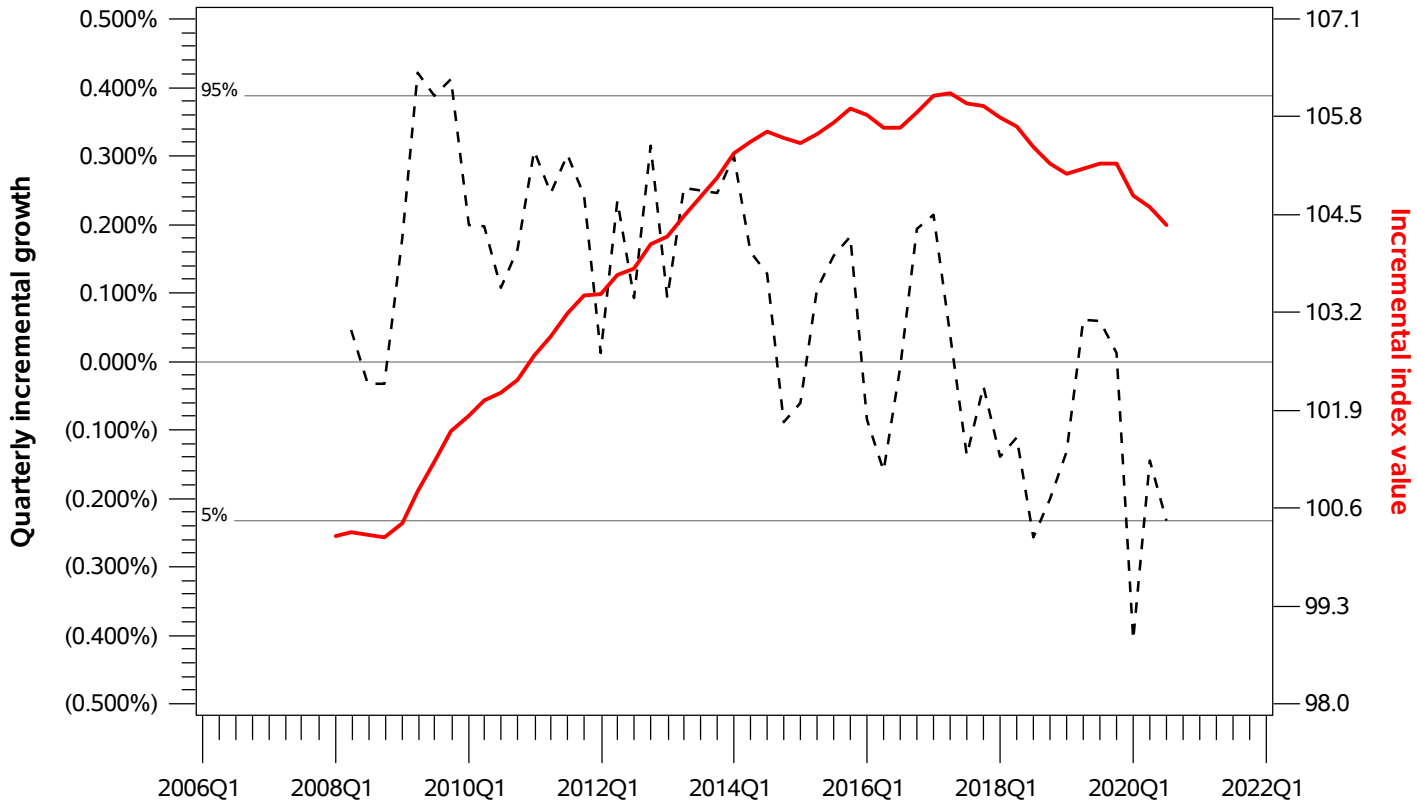


Table 57. ECI: W&S(PRIV) Information incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20251000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-31.2326	Z_{Tau}	-4.8224
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0003

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0308	AR(1) coefficient	-0.3385
Standard error	0.0226	Standard error	0.1358
t-statistic	-1.3641	t-statistic	-2.4920
Probability t	0.1789	Durbin-Watson	2.0357

Estimated incremental annual growth rate: (0.123%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

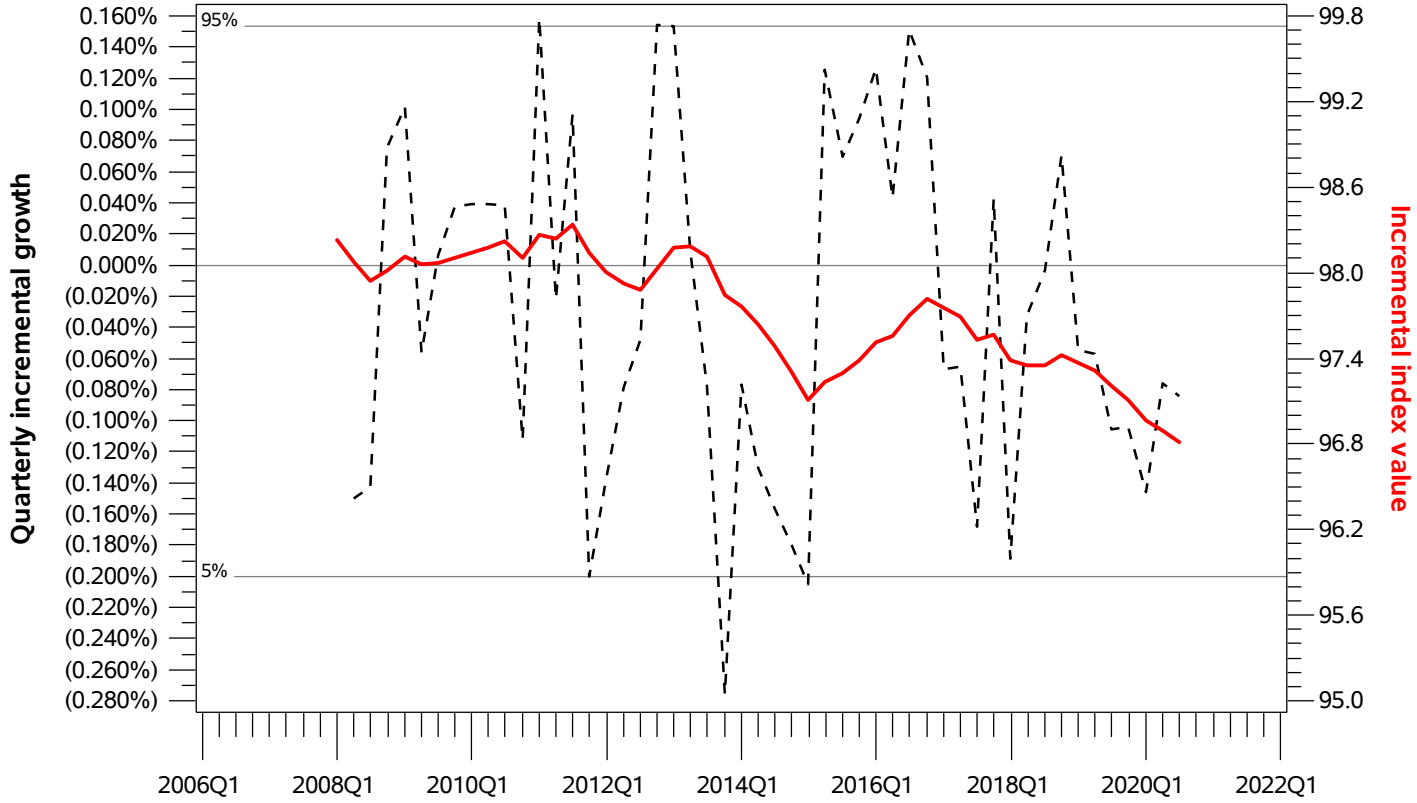


Table 58. ECI: W&S(PRIV) Finance and insurance incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20252000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.1621	Z_{Tau}	-3.3122
Prob Z_{Rho}	0.0079	Prob Z_{Tau}	0.0193

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0104	AR(1) coefficient	-0.6637
Standard error	0.0749	Standard error	0.1080
t-statistic	0.1388	t-statistic	-6.1469
Probability t	0.8902	Durbin-Watson	1.5398

Estimated incremental annual growth rate: 0.042%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

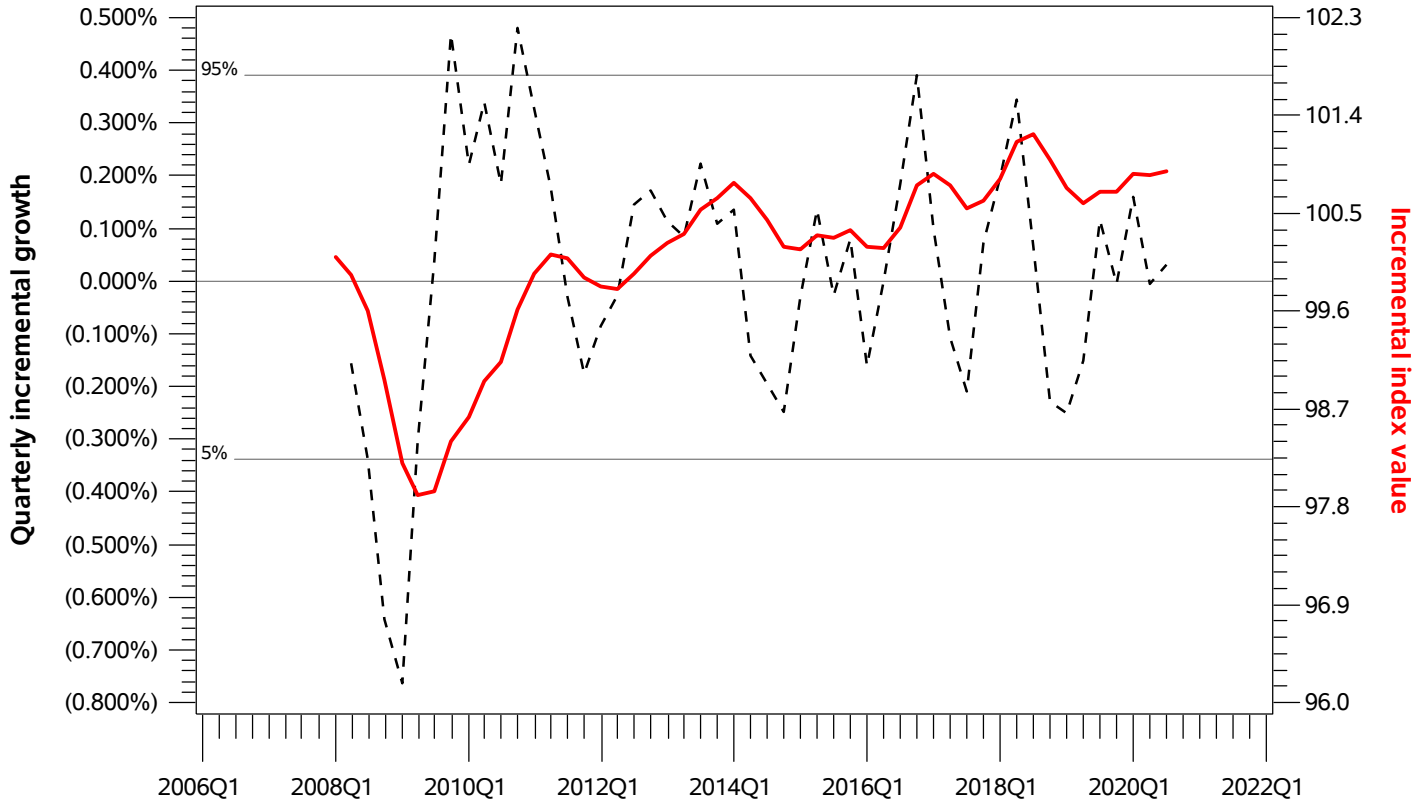


Table 59. ECI: W&S(PRIV) Financial activities incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS202520A000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.3400	Z_{Tau}	-3.3369
Prob Z_{Rho}	0.0075	Prob Z_{Tau}	0.0181

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0048	AR(1) coefficient	-0.6651
Standard error	0.0639	Standard error	0.1078
t-statistic	0.0753	t-statistic	-6.1699
Probability t	0.9403	Durbin-Watson	1.4938

Estimated incremental annual growth rate: 0.019%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

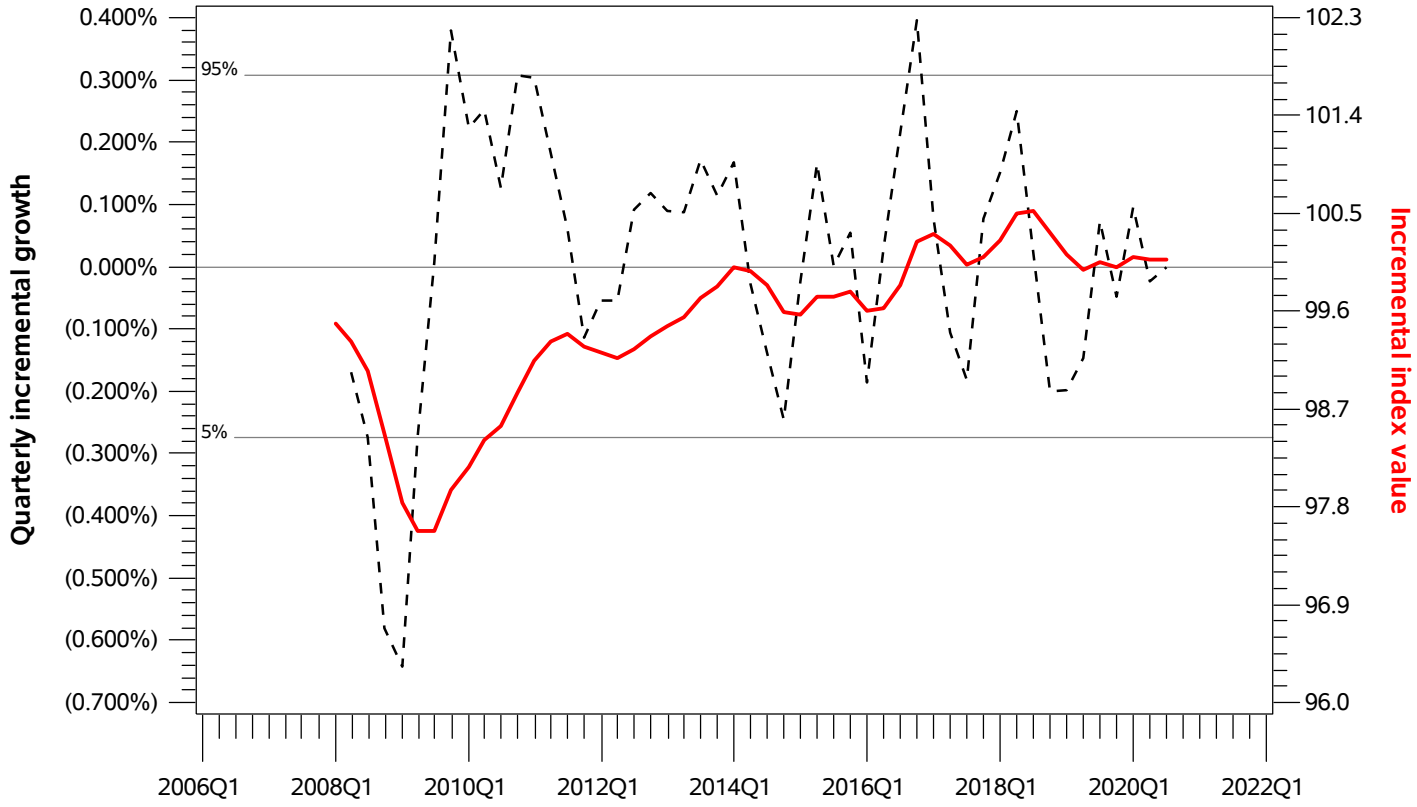


Table 60. ECI: W&S(PRIV) Credit intermediation and related activities incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20252200000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-24.8683	Z_{Tau}	-3.9100
Prob Z_{Rho}	0.0012	Prob Z_{Tau}	0.0037

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0016	AR(1) coefficient	-0.5349
Standard error	0.0518	Standard error	0.1220
t-statistic	0.0303	t-statistic	-4.3857
Probability t	0.9760	Durbin-Watson	1.7245

Estimated incremental annual growth rate: 0.006%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

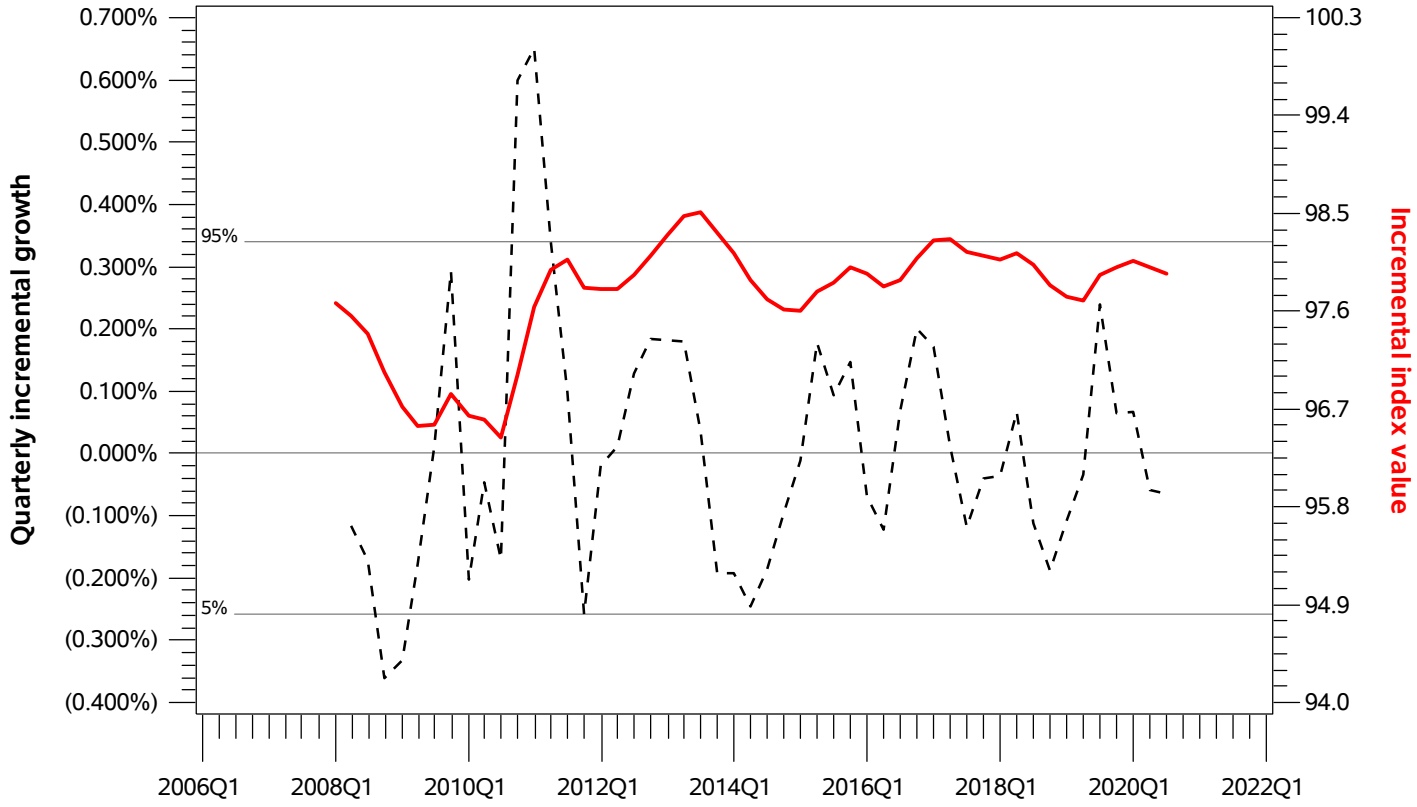


Table 61. ECI: W&S(PRIV) Insurance carriers and related activities incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20252400000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.0881	Z_{Tau}	-3.2589
Prob Z_{Rho}	0.0081	Prob Z_{Tau}	0.0221

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0255	AR(1) coefficient	-0.6601
Standard error	0.0800	Standard error	0.1084
t-statistic	-0.3189	t-statistic	-6.0886
Probability t	0.7512	Durbin-Watson	1.5898

Estimated incremental annual growth rate: (0.102%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

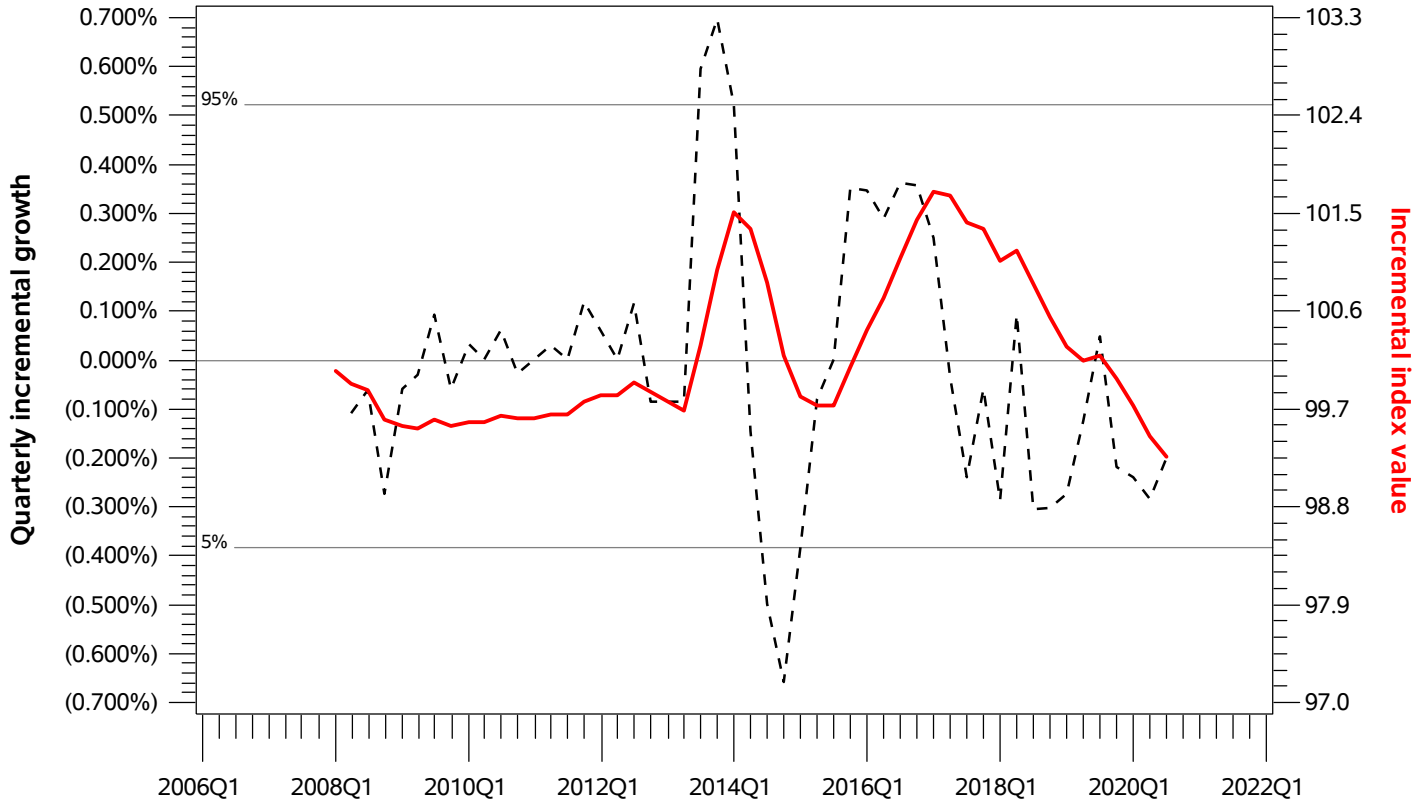


Table 62. ECI: W&S(PRIV) Professional, scientific, and technical services incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20254000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-31.0230	Z_{Tau}	-4.7393
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0003

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0037	AR(1) coefficient	-0.3441
Standard error	0.0439	Standard error	0.1355
t-statistic	0.0843	t-statistic	-2.5388
Probability t	0.9332	Durbin-Watson	1.9975

Estimated incremental annual growth rate: 0.015%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

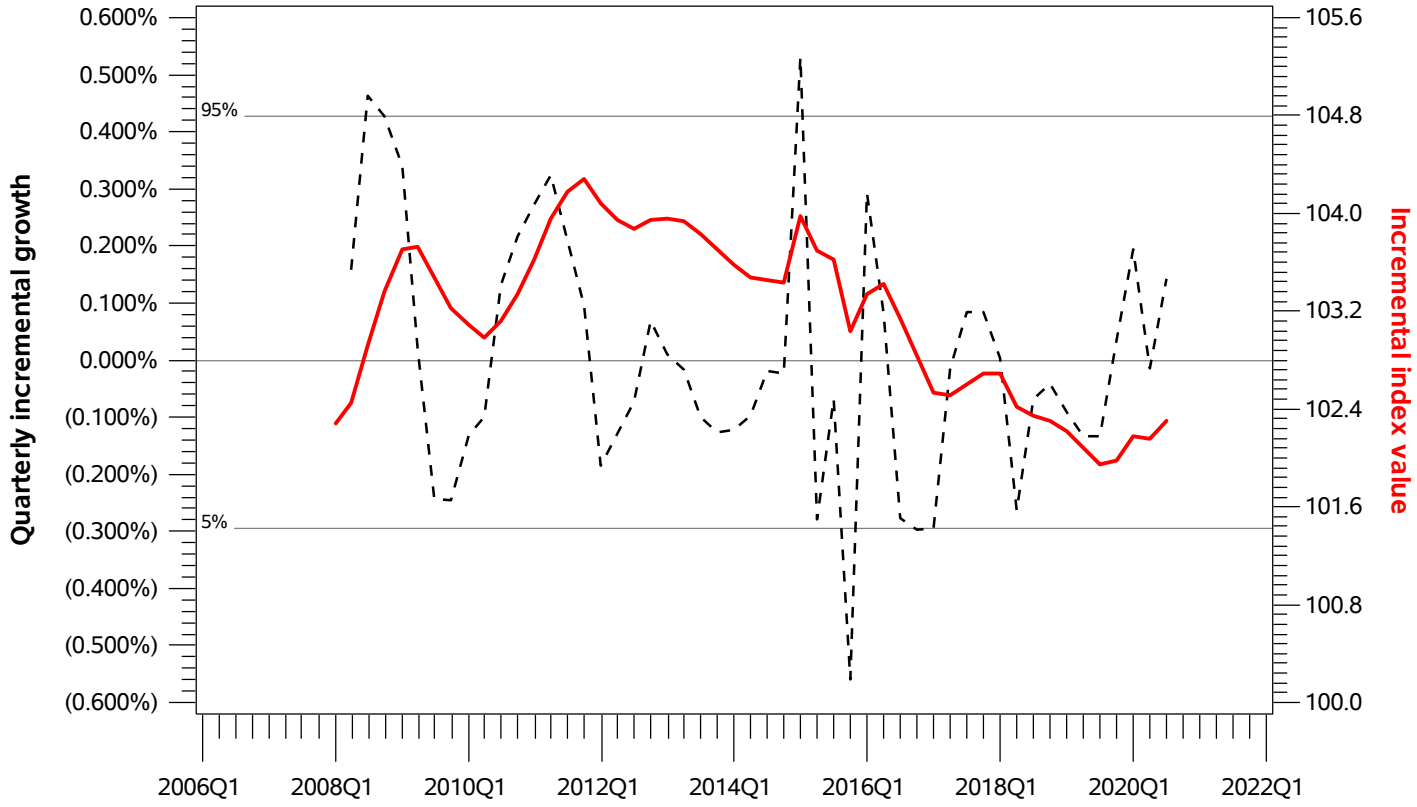


Table 63. ECI: W&S(PRIV) Professional and business services incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS202540A000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.9051	Z_{Tau}	-3.6248
Prob Z_{Rho}	0.0033	Prob Z_{Tau}	0.0084

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0013	AR(1) coefficient	-0.5668
Standard error	0.0388	Standard error	0.1189
t-statistic	0.0347	t-statistic	-4.7666
Probability t	0.9725	Durbin-Watson	1.7258

Estimated incremental annual growth rate: 0.005%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

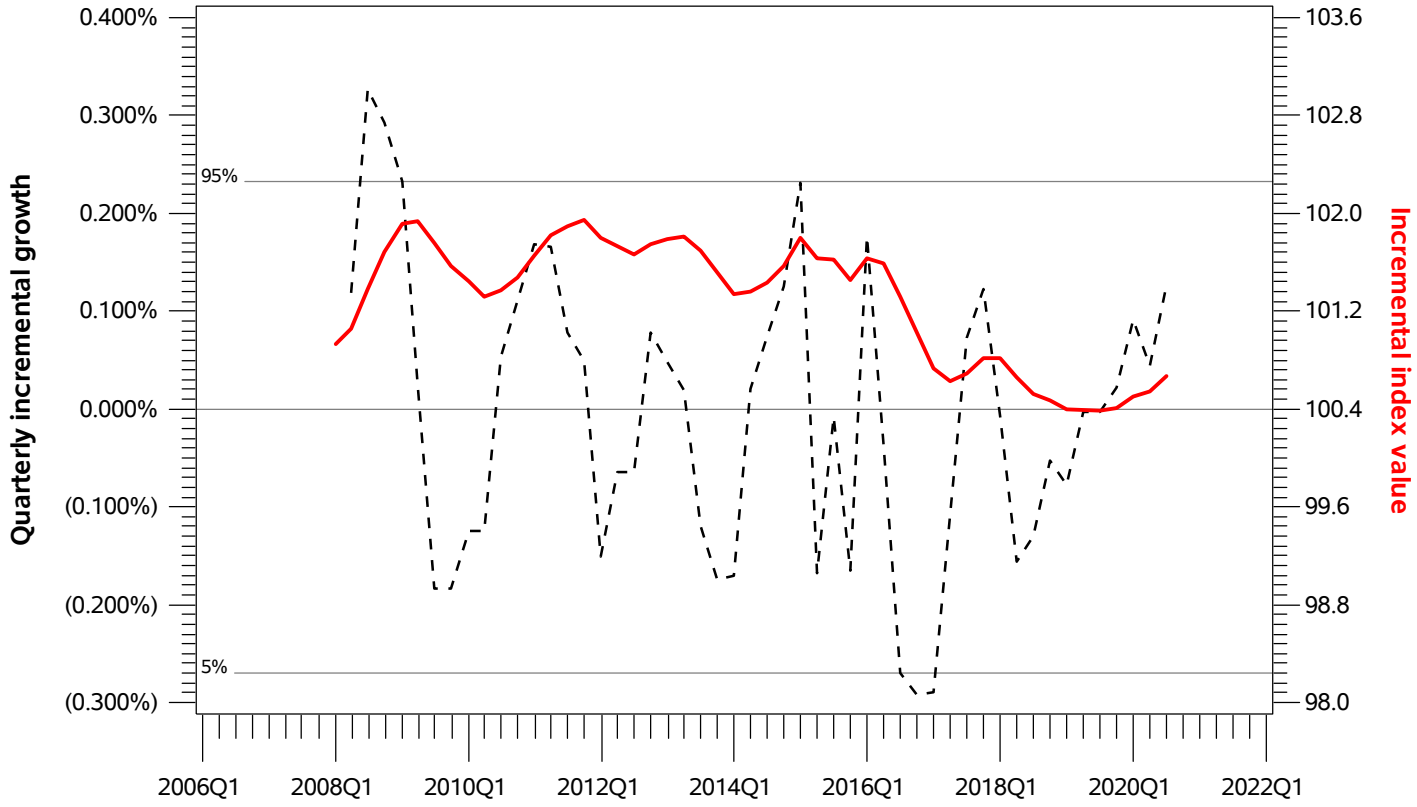


Table 64. ECI: W&S(PRIV) Education and health services incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20260000000000I and CIS202S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.4800	Z_{Tau}	-3.2867
Prob Z_{Rho}	0.0098	Prob Z_{Tau}	0.0206

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0553	AR(1) coefficient	-0.5977
Standard error	0.0278	Standard error	0.1157
t-statistic	-1.9935	t-statistic	-5.1651
Probability t	0.0519	Durbin-Watson	2.0255

Estimated incremental annual growth rate: (0.221%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (0.221%)

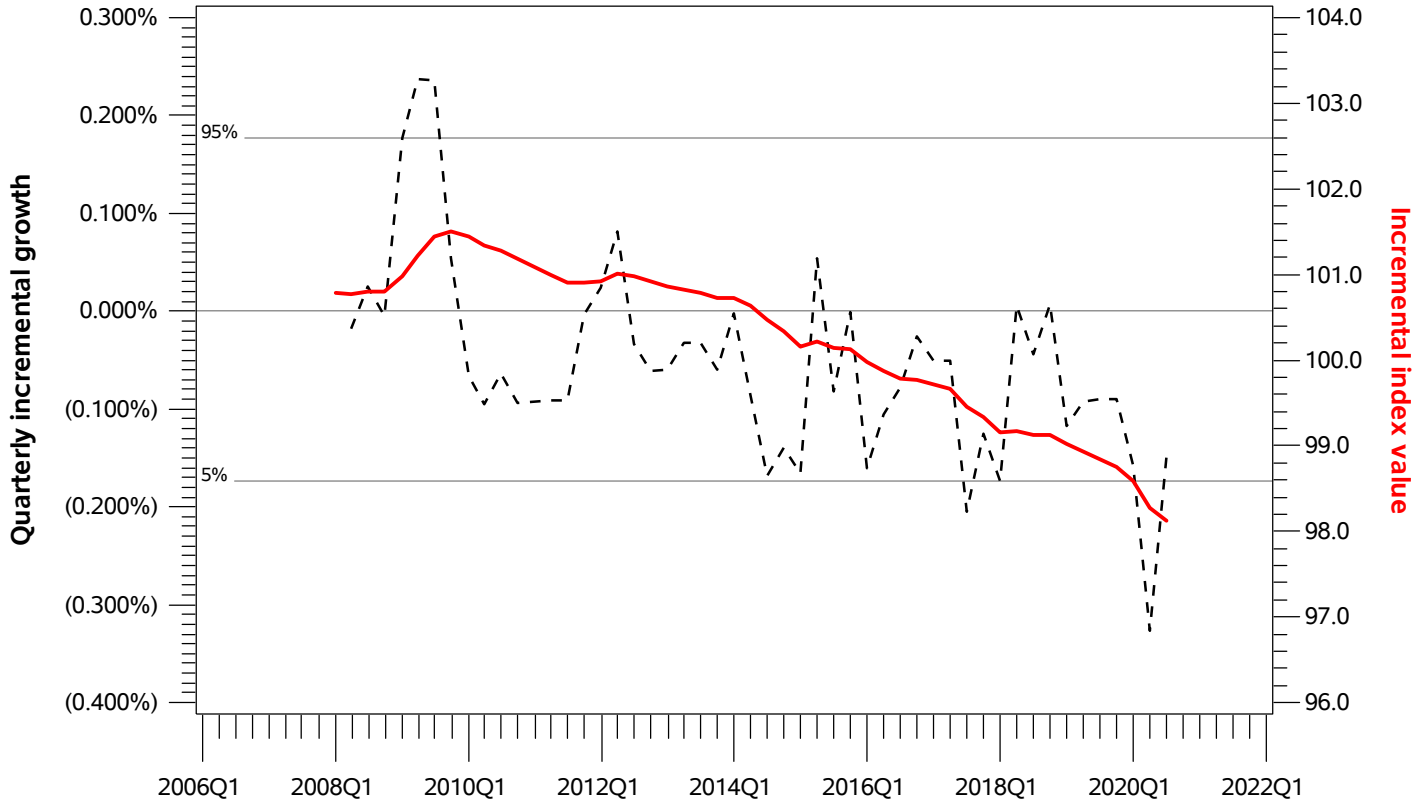


Table 65. ECI: W&S(PRIV) Education services incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20261000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-15.0925	Z_{Tau}	-2.9851
Prob Z_{Rho}	0.0274	Prob Z_{Tau}	0.0430

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0439	AR(1) coefficient	-0.6346
Standard error	0.0356	Standard error	0.1116
t-statistic	-1.2322	t-statistic	-5.6886
Probability t	0.2239	Durbin-Watson	2.1690

Estimated incremental annual growth rate: (0.175%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

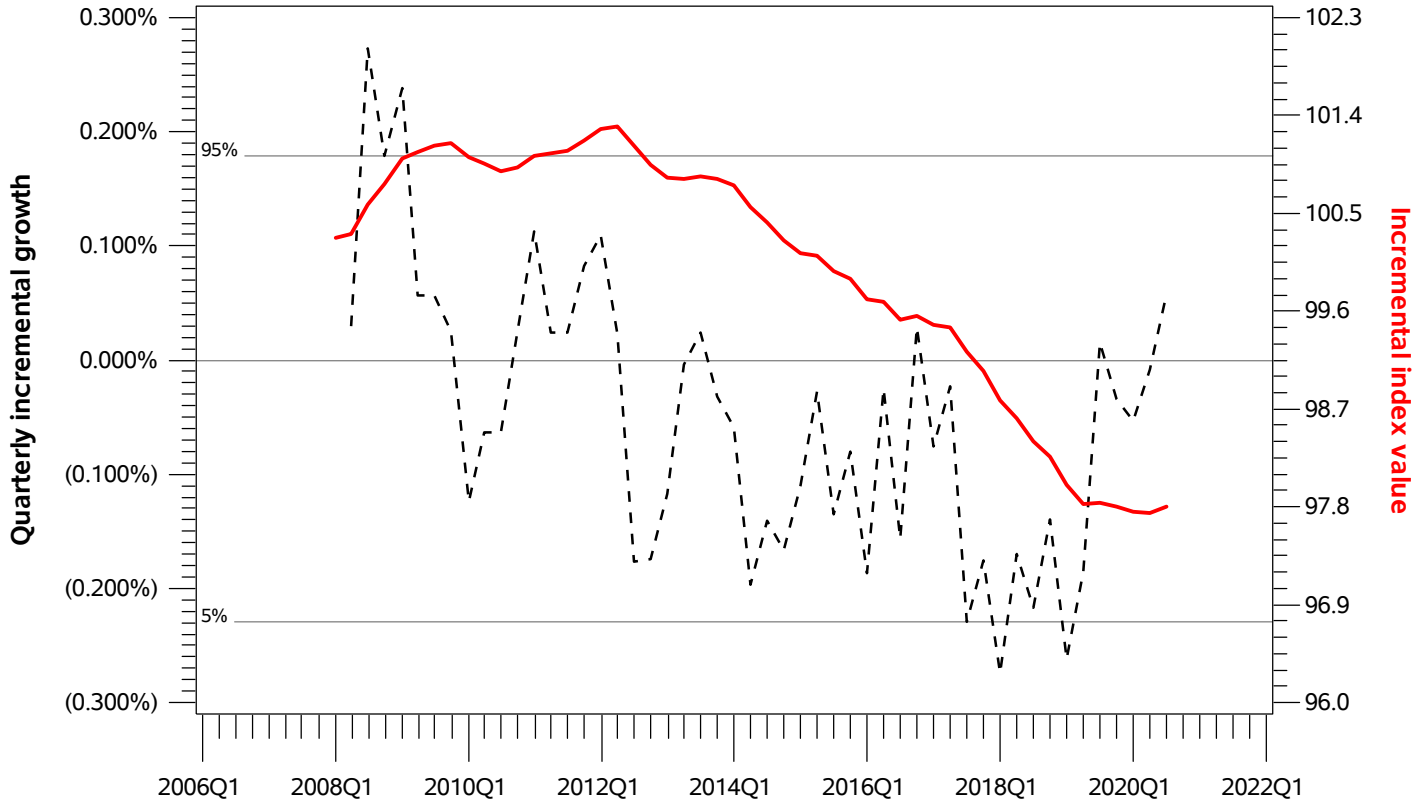


Table 66. ECI: W&S(PRIV) Junior colleges, colleges, and universities incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20261200000000I and CIS202S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-16.4763	Z_{Tau}	-3.1328
Prob Z_{Rho}	0.0181	Prob Z_{Tau}	0.0302

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0399	AR(1) coefficient	-0.6412
Standard error	0.0386	Standard error	0.1108
t-statistic	-1.0332	t-statistic	-5.7895
Probability t	0.3067	Durbin-Watson	2.0825

Estimated incremental annual growth rate: (0.159%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

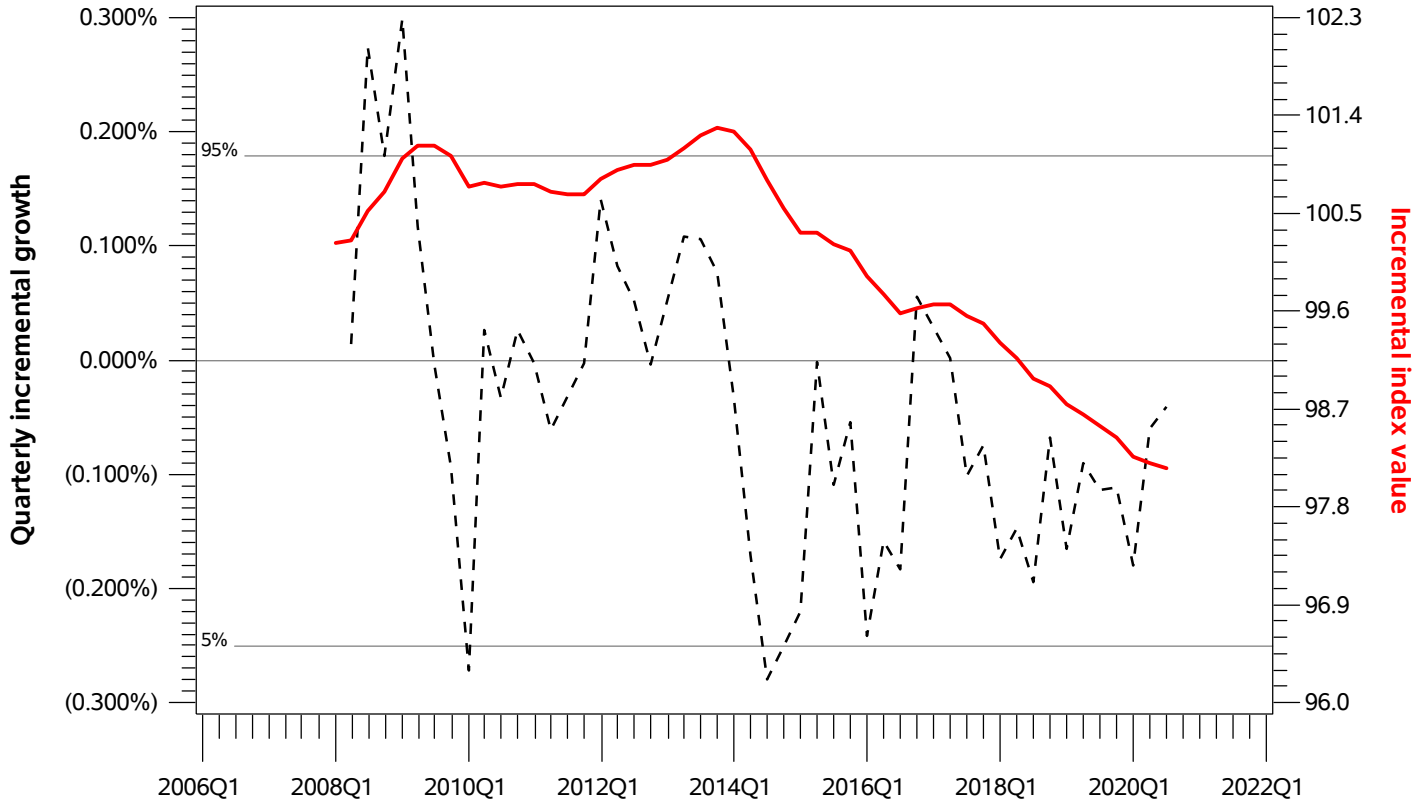


Table 67. ECI: W&S(PRIV) Health care and social assistance incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20262000000000I and CIS202S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.3909	Z_{Tau}	-3.4503
Prob Z_{Rho}	0.0054	Prob Z_{Tau}	0.0134

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0561	AR(1) coefficient	-0.5542
Standard error	0.0298	Standard error	0.1201
t-statistic	-1.8791	t-statistic	-4.6132
Probability t	0.0663	Durbin-Watson	2.0076

Estimated incremental annual growth rate: (0.224%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (0.224%)

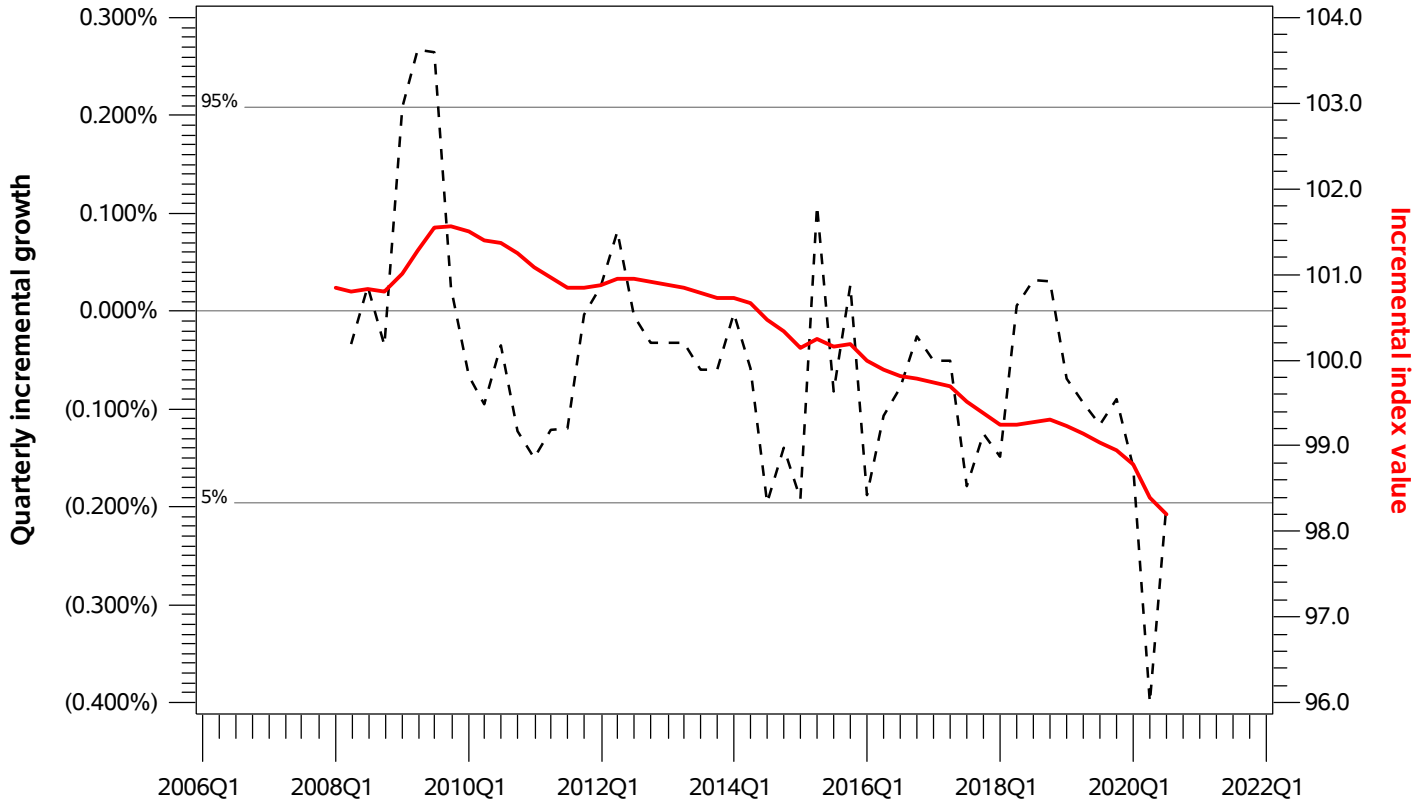


Table 68. ECI: W&S(PRIV) Hospitals incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20262200000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-14.3184	Z_{Tau}	-2.9572
Prob Z_{Rho}	0.0344	Prob Z_{Tau}	0.0459

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0297	AR(1) coefficient	-0.6614
Standard error	0.0435	Standard error	0.1083
t-statistic	-0.6840	t-statistic	-6.1088
Probability t	0.4973	Durbin-Watson	2.2229

Estimated incremental annual growth rate: (0.119%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

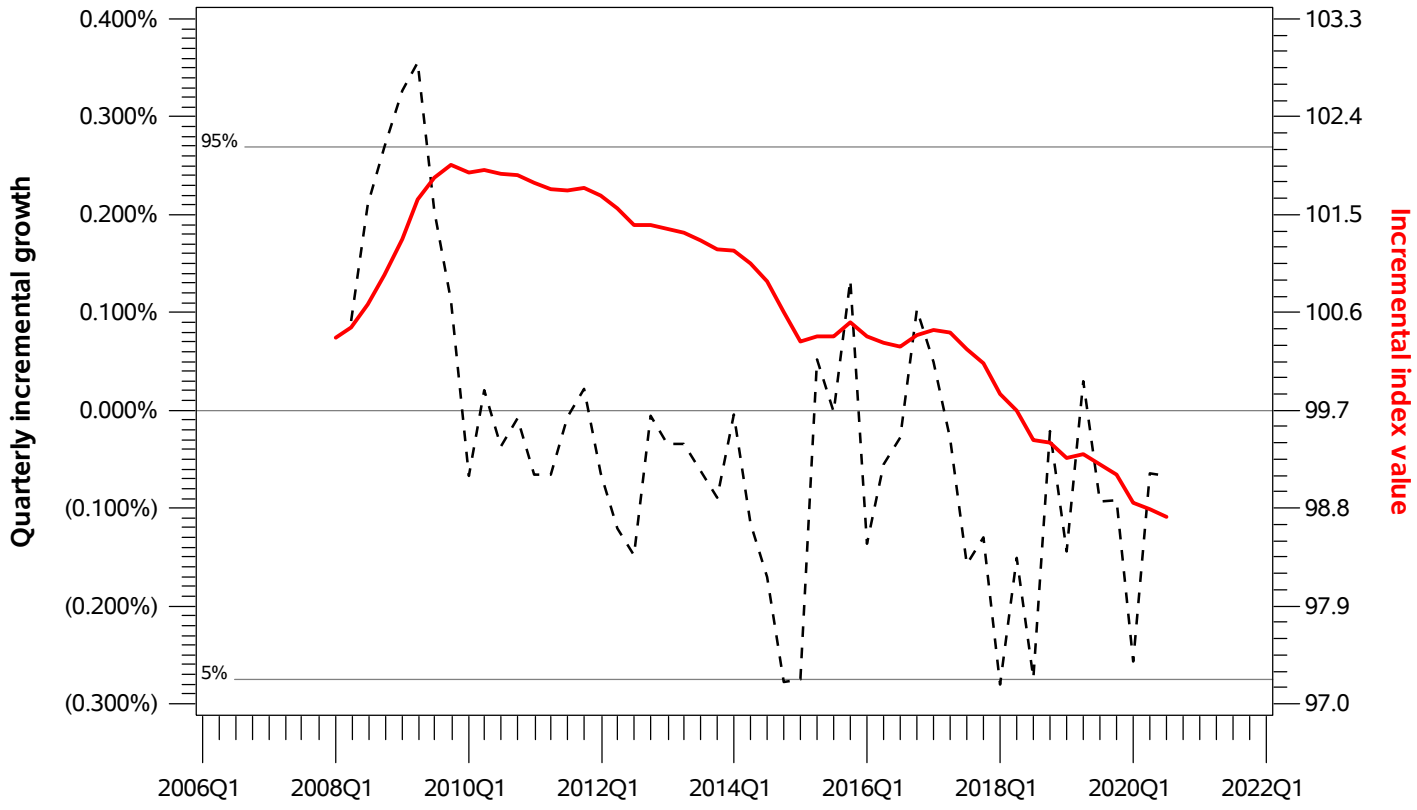


Table 69. ECI: W&S(PRIV) Leisure and hospitality incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20270000000000I and CIS202S0000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-9.5715	Z_{Tau}	-2.3084
Prob Z_{Rho}	0.1297	Prob Z_{Tau}	0.1732

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0324	AR(1) coefficient	-0.7617
Standard error	0.0841	Standard error	0.0935
t-statistic	0.3856	t-statistic	-8.1443
Probability t	0.7015	Durbin-Watson	2.3471

Estimated incremental annual growth rate: 0.130%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

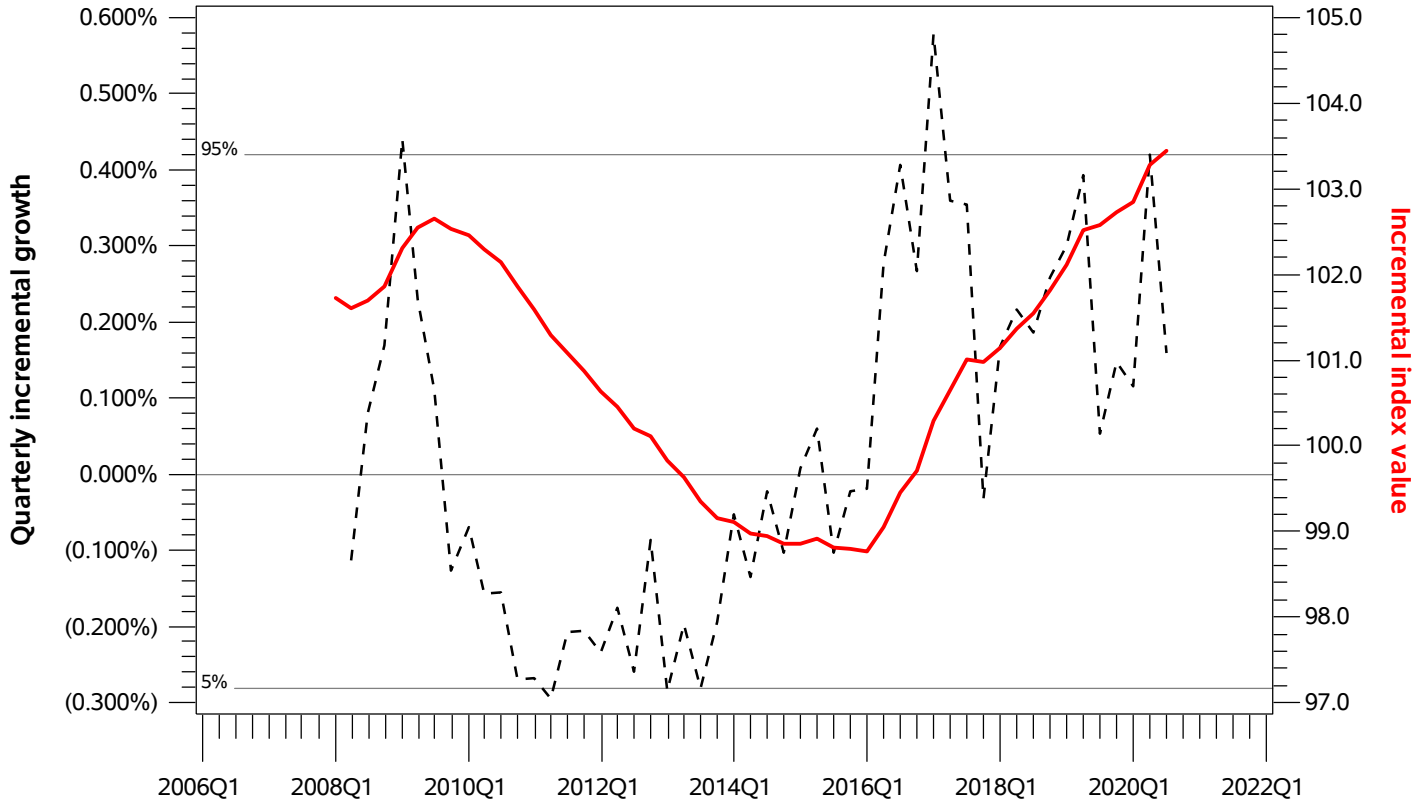


Table 70. ECI: W&S(PRIV) Other services, except public administration incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIS20281000000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-32.9729	Z_{Tau}	-4.7382
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0003

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0228	AR(1) coefficient	-0.3549
Standard error	0.0336	Standard error	0.1349
t-statistic	-0.6780	t-statistic	-2.6297
Probability t	0.5010	Durbin-Watson	1.8187

Estimated incremental annual growth rate: (0.091%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

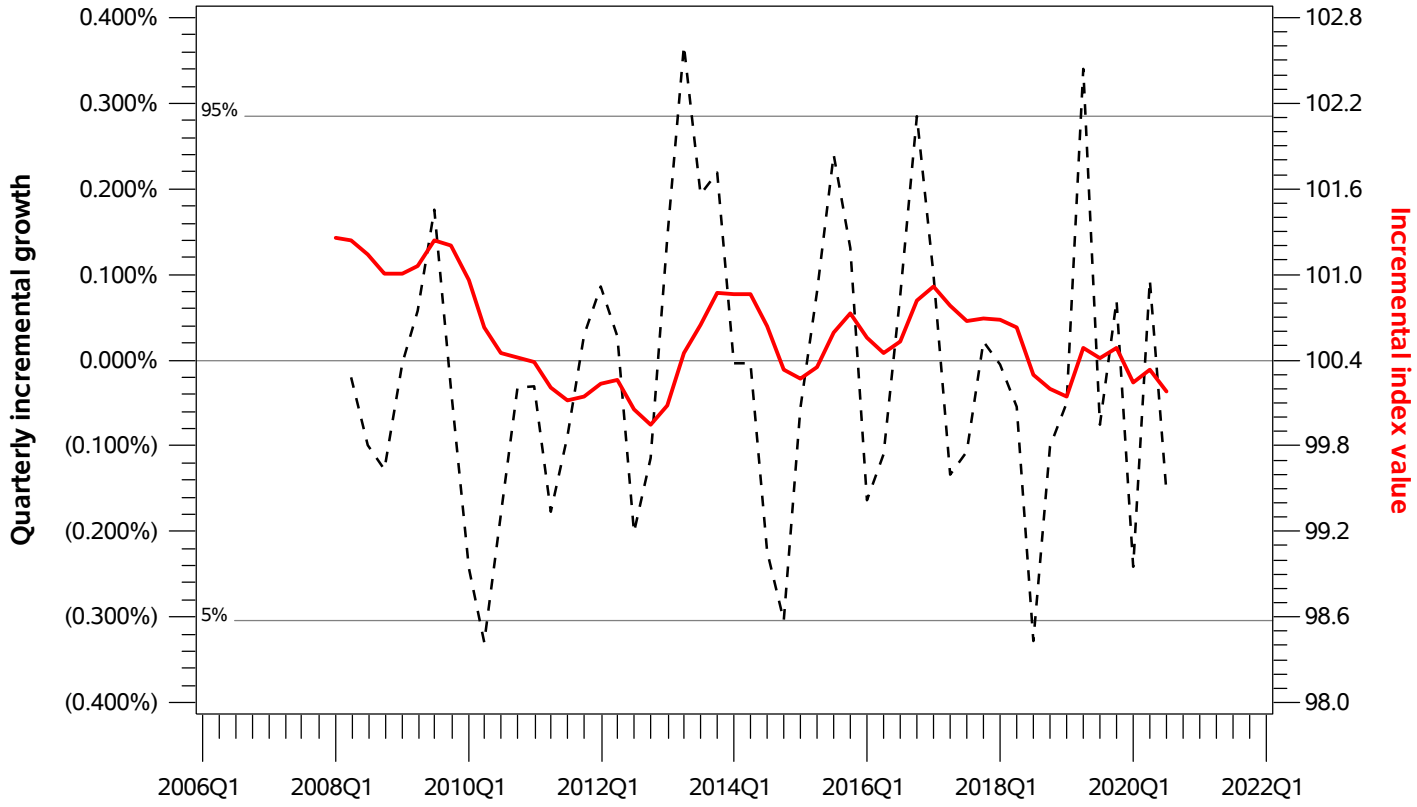


Table 71. ECI: BENE(PRIV) Management, professional, and related incremental growth over ECI: BENE(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20300001000001 and CIS20300000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.2111	Z_{Tau}	-3.4181
Prob Z_{Rho}	0.0078	Prob Z_{Tau}	0.0146

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0329	AR(1) coefficient	-0.6240
Standard error	0.0305	Standard error	0.1128
t-statistic	-1.0781	t-statistic	-5.5326
Probability t	0.2864	Durbin-Watson	1.7392

Estimated incremental annual growth rate: (0.132%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

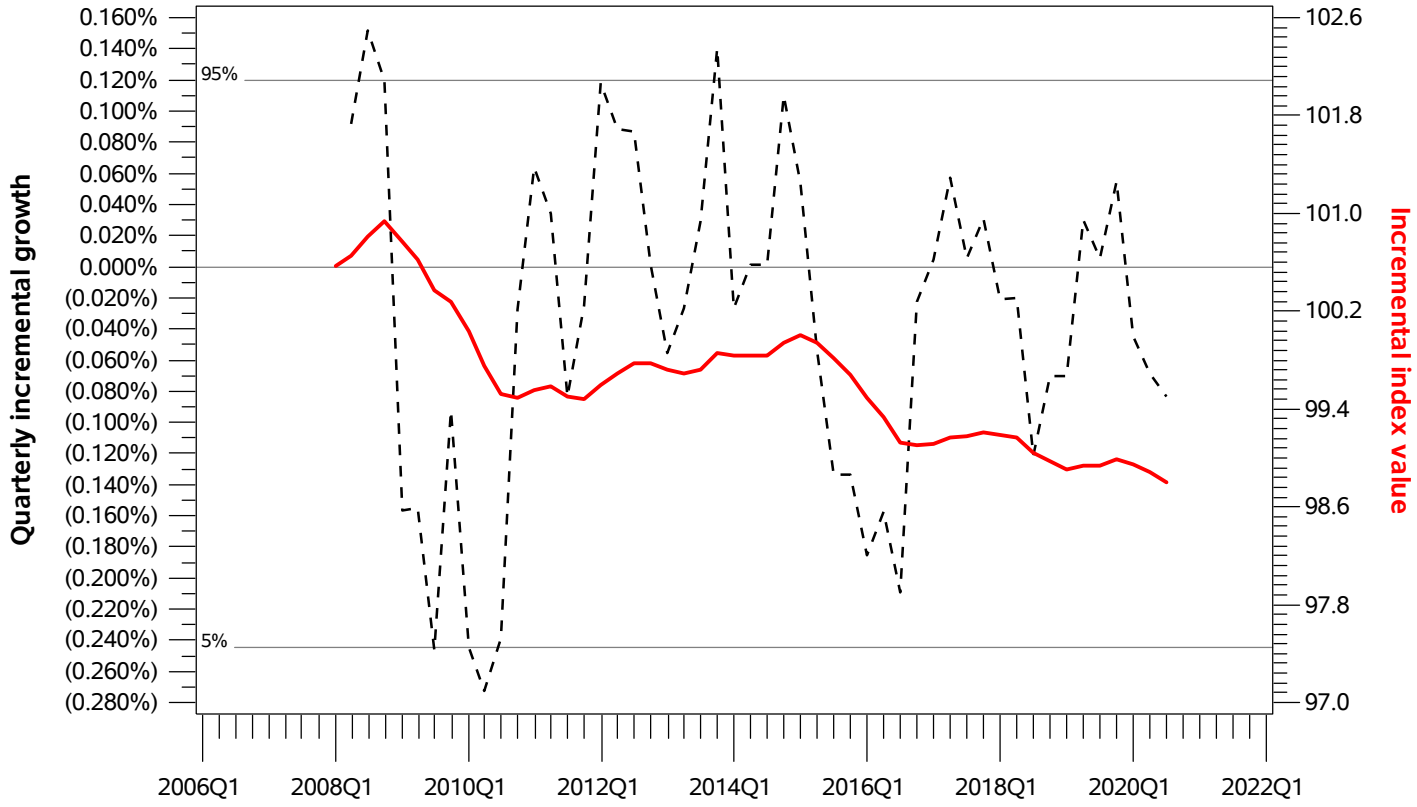


Table 72. ECI: BENE(PRIV) Sales and office incremental growth over ECI: BENE(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20300002000001 and CIS20300000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-17.7705	Z_{Tau}	-3.2008
Prob Z_{Rho}	0.0122	Prob Z_{Tau}	0.0256

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0185	AR(1) coefficient	-0.6627
Standard error	0.0347	Standard error	0.1081
t-statistic	0.5317	t-statistic	-6.1307
Probability t	0.5974	Durbin-Watson	1.7980

Estimated incremental annual growth rate: 0.074%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

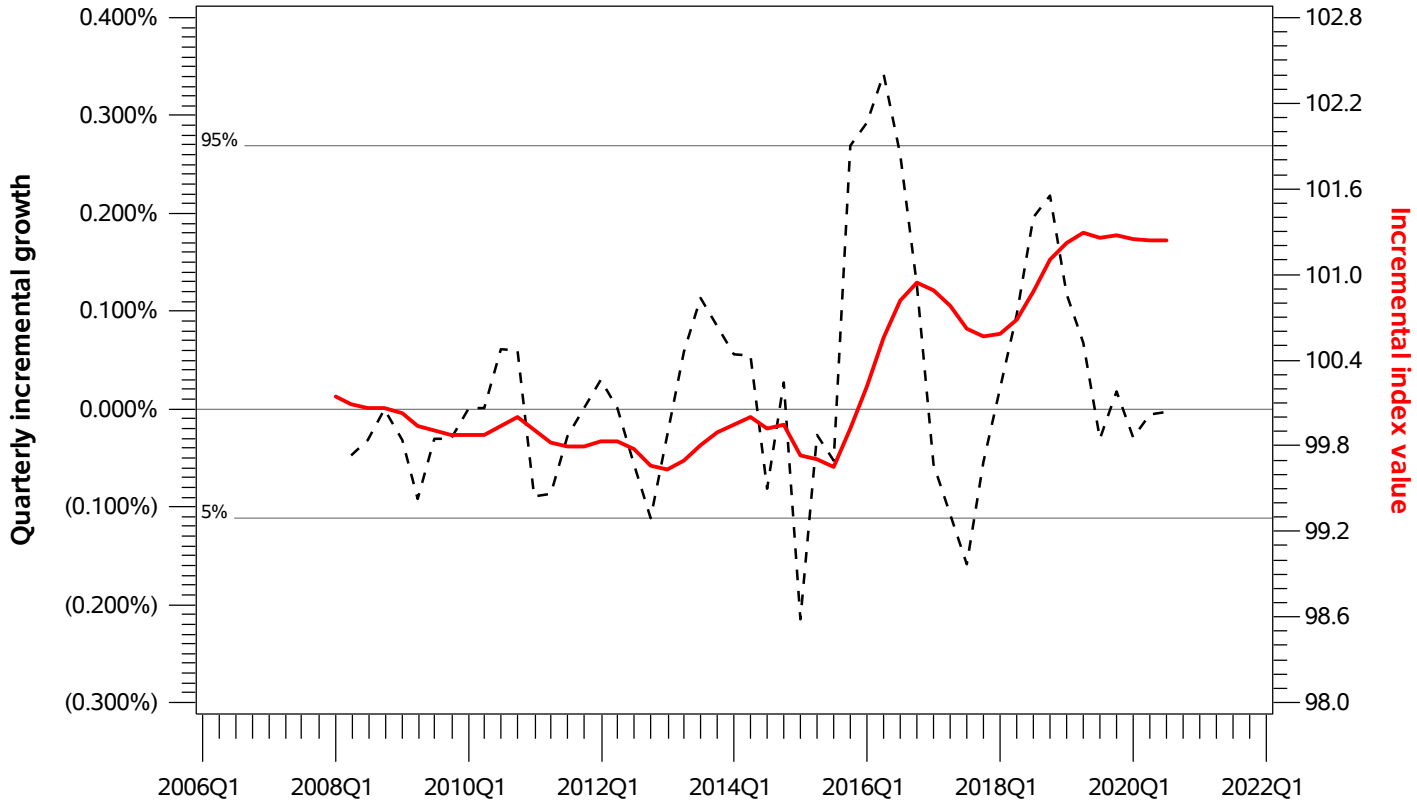


Table 73. ECI: BENE(PRIV) Service occupations incremental growth over ECI: BENE(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20300003000001 and CIS20300000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.6275	Z_{Tau}	-3.2710
Prob Z_{Rho}	0.0094	Prob Z_{Tau}	0.0214

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0206	AR(1) coefficient	-0.6604
Standard error	0.0504	Standard error	0.1084
t-statistic	-0.4093	t-statistic	-6.0927
Probability t	0.6841	Durbin-Watson	1.6765

Estimated incremental annual growth rate: (0.083%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

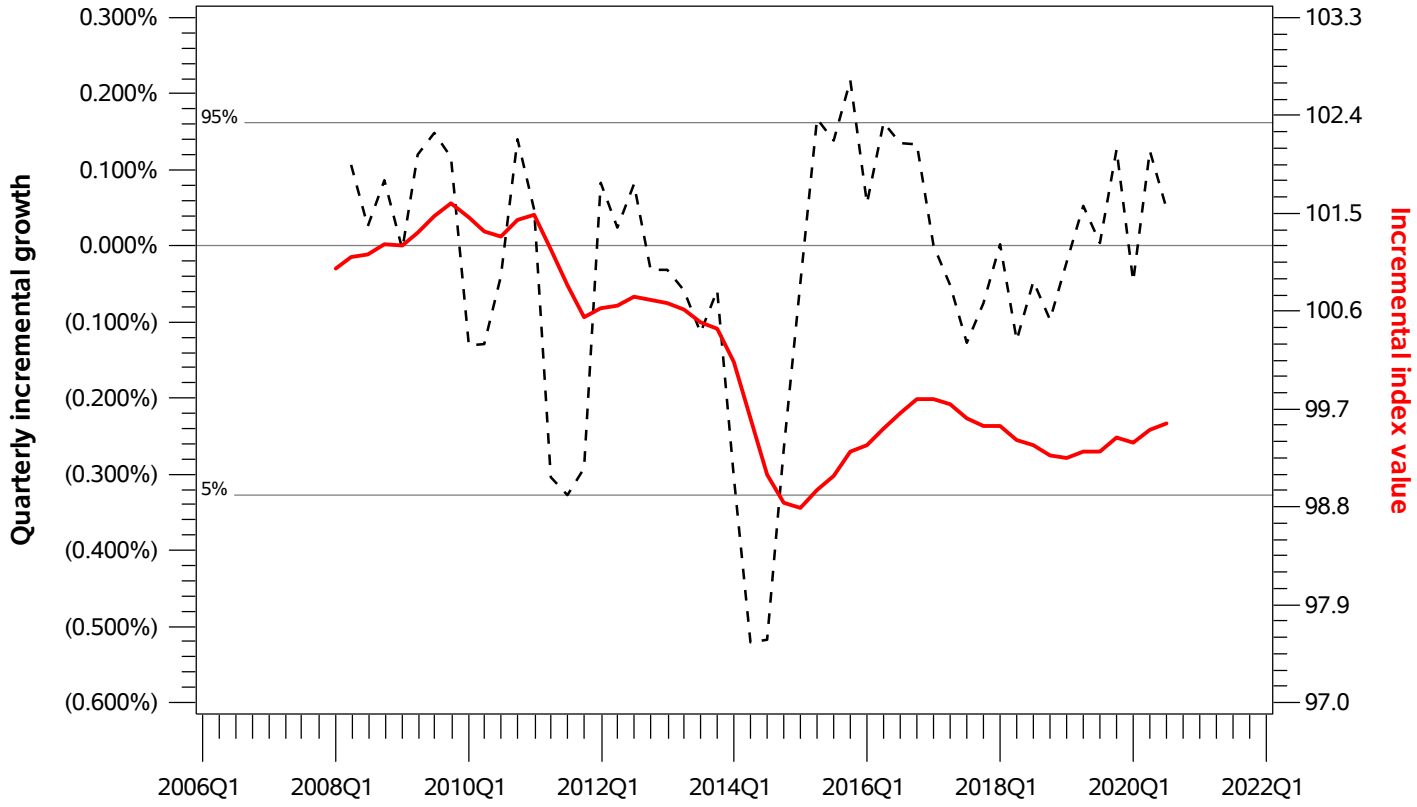


Table 74. ECI: BENE(PRIV) Natural resources, construction, and maintenance incremental growth over ECI: BENE(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20300004000001 and CIS20300000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.0443	Z_{Tau}	-3.4938
Prob Z_{Rho}	0.0060	Prob Z_{Tau}	0.0120

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0295	AR(1) coefficient	-0.6210
Standard error	0.0469	Standard error	0.1131
t-statistic	0.6299	t-statistic	-5.4895
Probability t	0.5318	Durbin-Watson	1.7236

Estimated incremental annual growth rate: 0.118%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

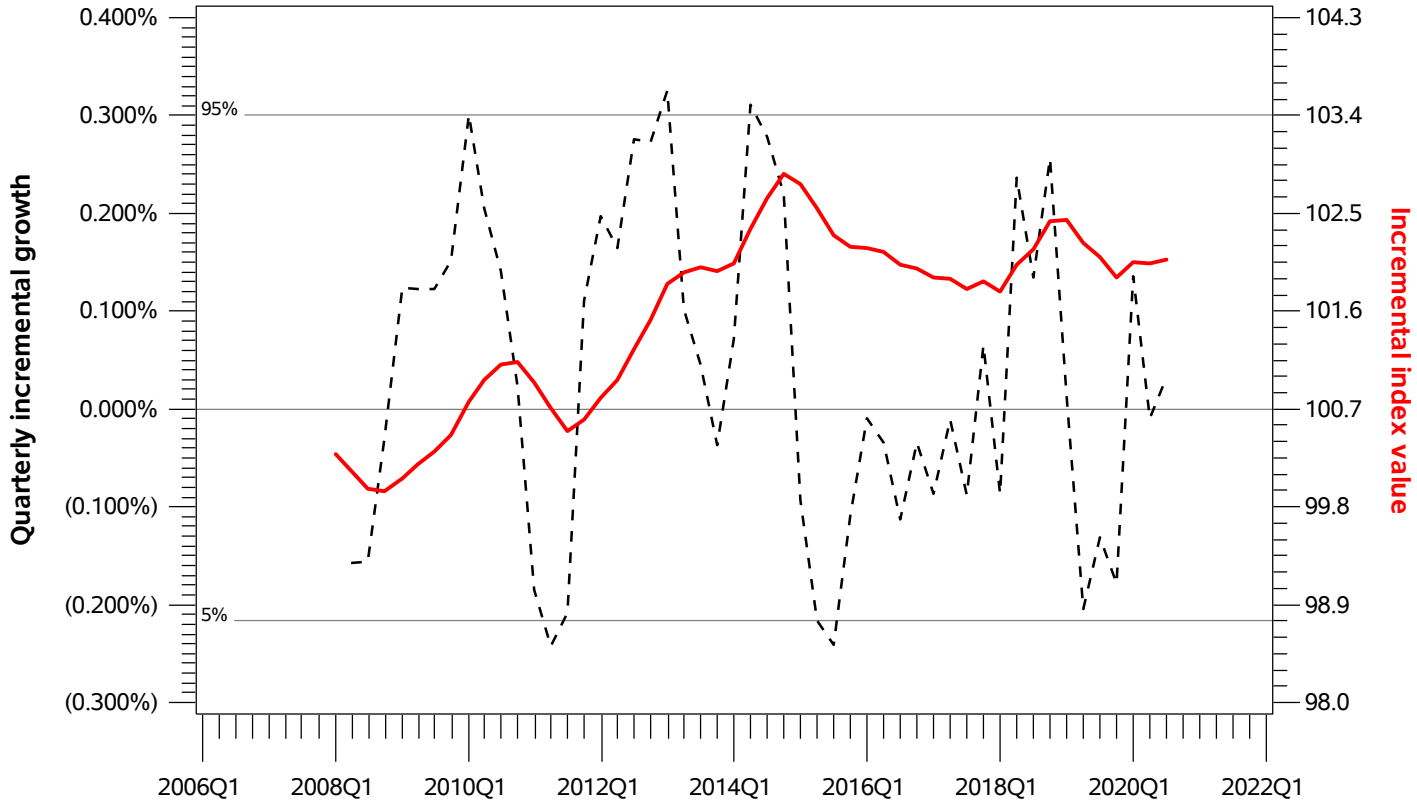


Table 75. ECI: BENE(PRIV) Production, transportation, and material moving incremental growth over ECI: BENE(PRIV) All industries and occupations

LABSTAT series identifiers: CIS20300005000001 and CIS20300000000001
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.6471	Z_{Tau}	-3.6145
Prob Z_{Rho}	0.0036	Prob Z_{Tau}	0.0086

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0483	AR(1) coefficient	-0.5902
Standard error	0.0640	Standard error	0.1165
t-statistic	0.7542	t-statistic	-5.0648
Probability t	0.4544	Durbin-Watson	1.7290

Estimated incremental annual growth rate: 0.193%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

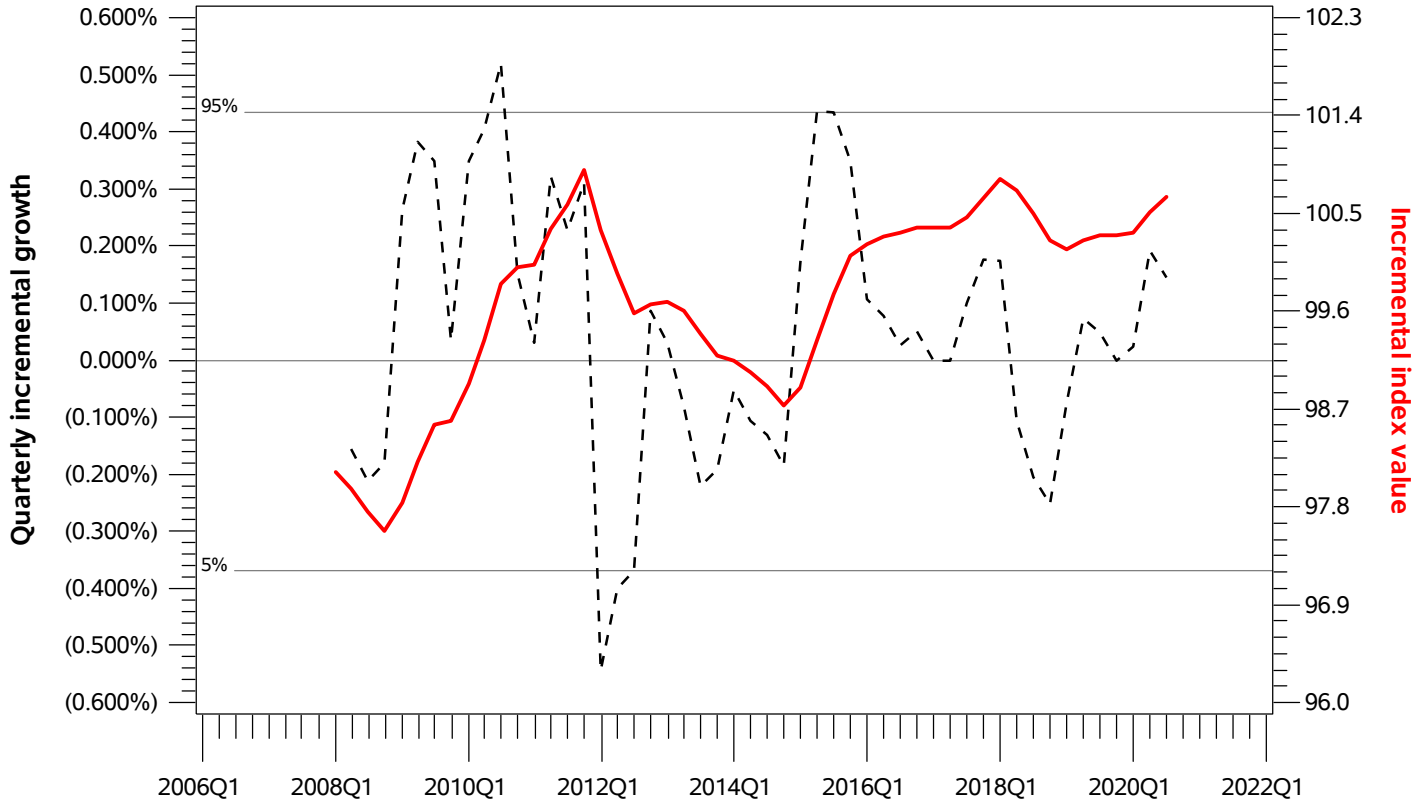


Table 76. ECI: COMP(S&L) Education and health services incremental growth over ECI: COMP(S&L) All industries and occupations

LABSTAT series identifiers: CIS30160000000000I and CIS30100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-18.2165	Z_{Tau}	-3.5511
Prob Z_{Rho}	0.0107	Prob Z_{Tau}	0.0102

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0128	AR(1) coefficient	-0.6626
Standard error	0.0097	Standard error	0.1081
t-statistic	-1.3199	t-statistic	-6.1299
Probability t	0.1931	Durbin-Watson	1.5613

Estimated incremental annual growth rate: (0.051%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

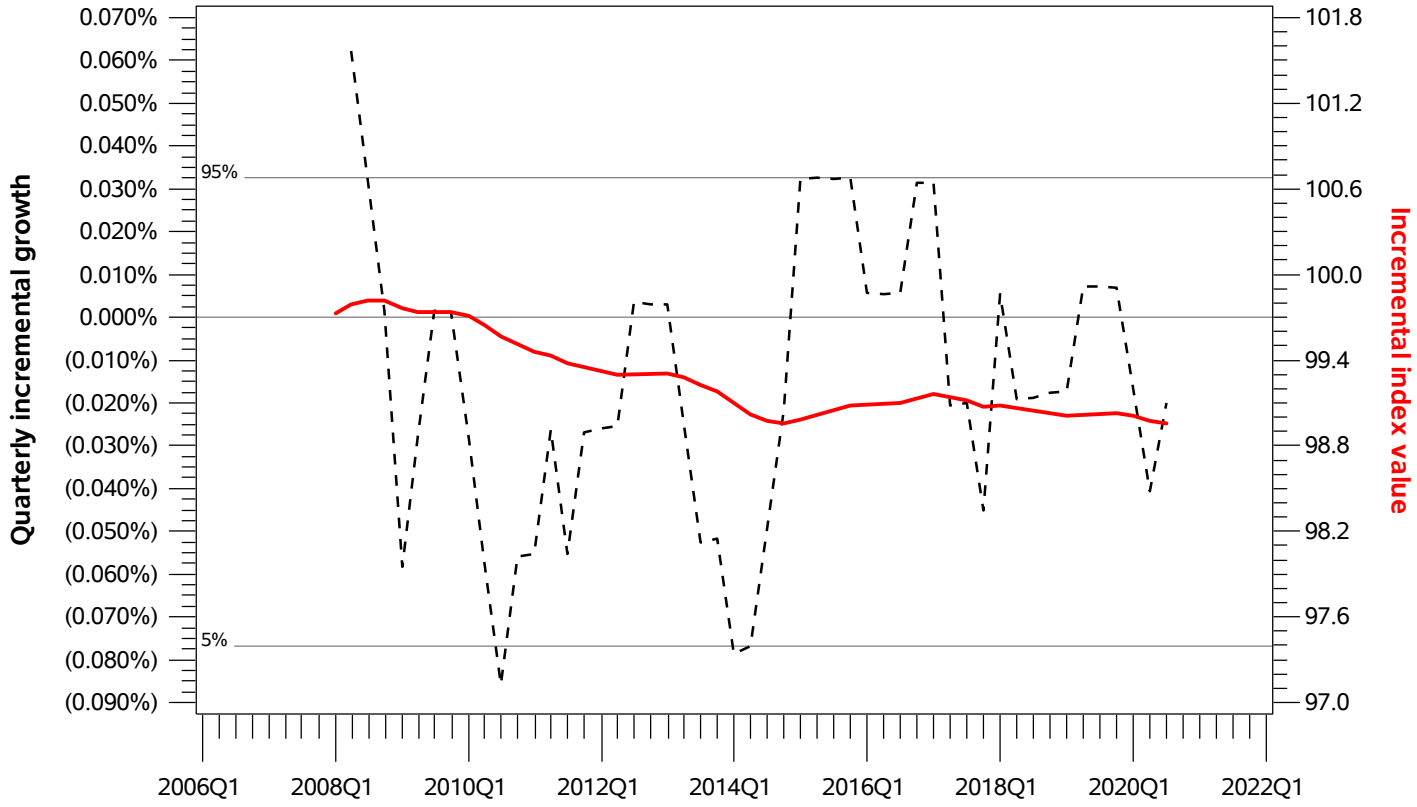


Table 77. ECI: COMP(S&L) Education services incremental growth over ECI: COMP(S&L) All industries and occupations

LABSTAT series identifiers: CIS30161000000000I and CIS30100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-17.5266	Z_{Tau}	-3.2404
Prob Z_{Rho}	0.0132	Prob Z_{Tau}	0.0232

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0156	AR(1) coefficient	-0.7008
Standard error	0.0136	Standard error	0.1030
t-statistic	-1.1448	t-statistic	-6.8063
Probability t	0.2580	Durbin-Watson	1.5089

Estimated incremental annual growth rate: (0.062%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

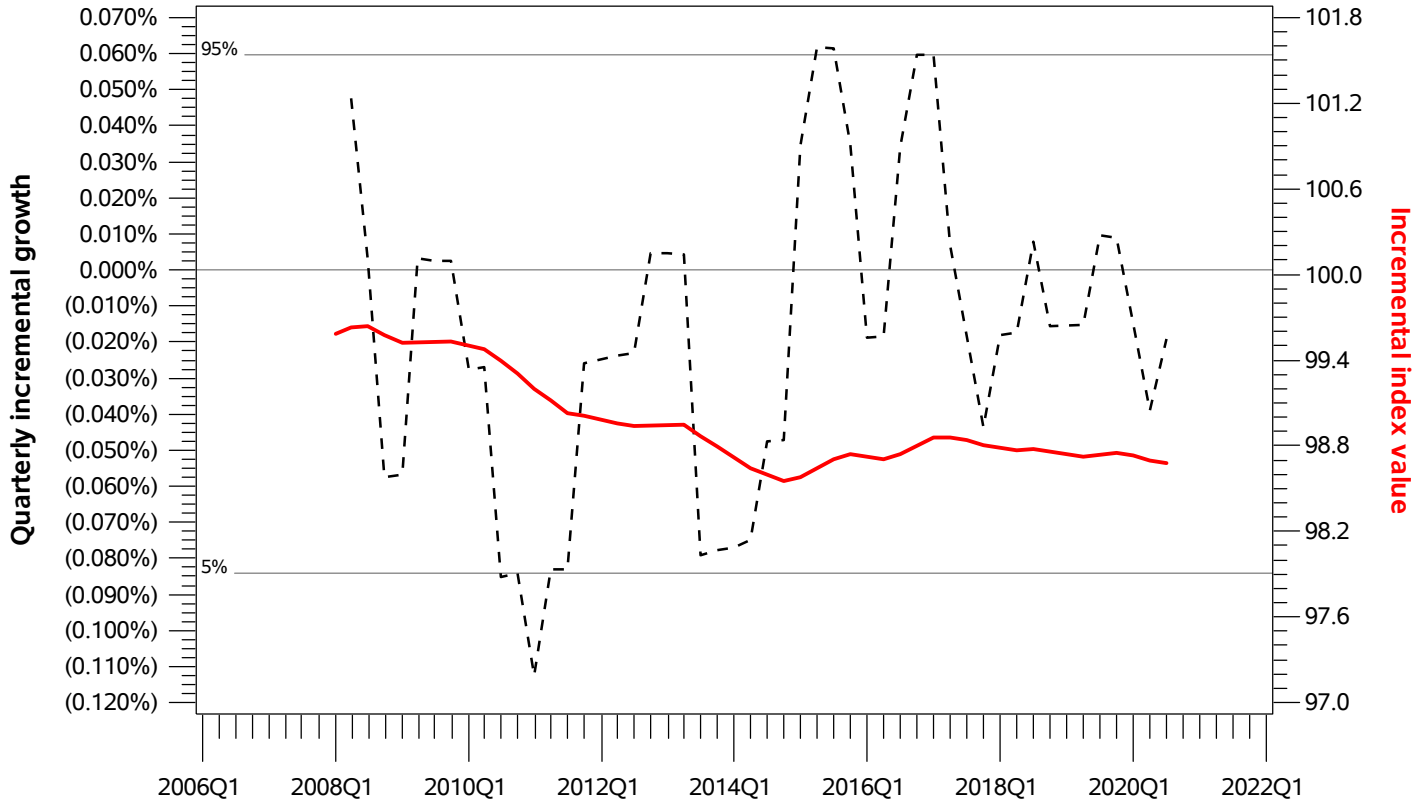


Table 78. ECI: COMP(S&L) Schools incremental growth over ECI: COMP(S&L) All industries and occupations

LABSTAT series identifiers: CIS30161050000000I and CIS30100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-16.8363	Z_{Tau}	-3.2560
Prob Z_{Rho}	0.0163	Prob Z_{Tau}	0.0223

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0172	AR(1) coefficient	-0.6701
Standard error	0.0126	Standard error	0.1071
t-statistic	-1.3658	t-statistic	-6.2542
Probability t	0.1784	Durbin-Watson	1.8624

Estimated incremental annual growth rate: (0.069%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

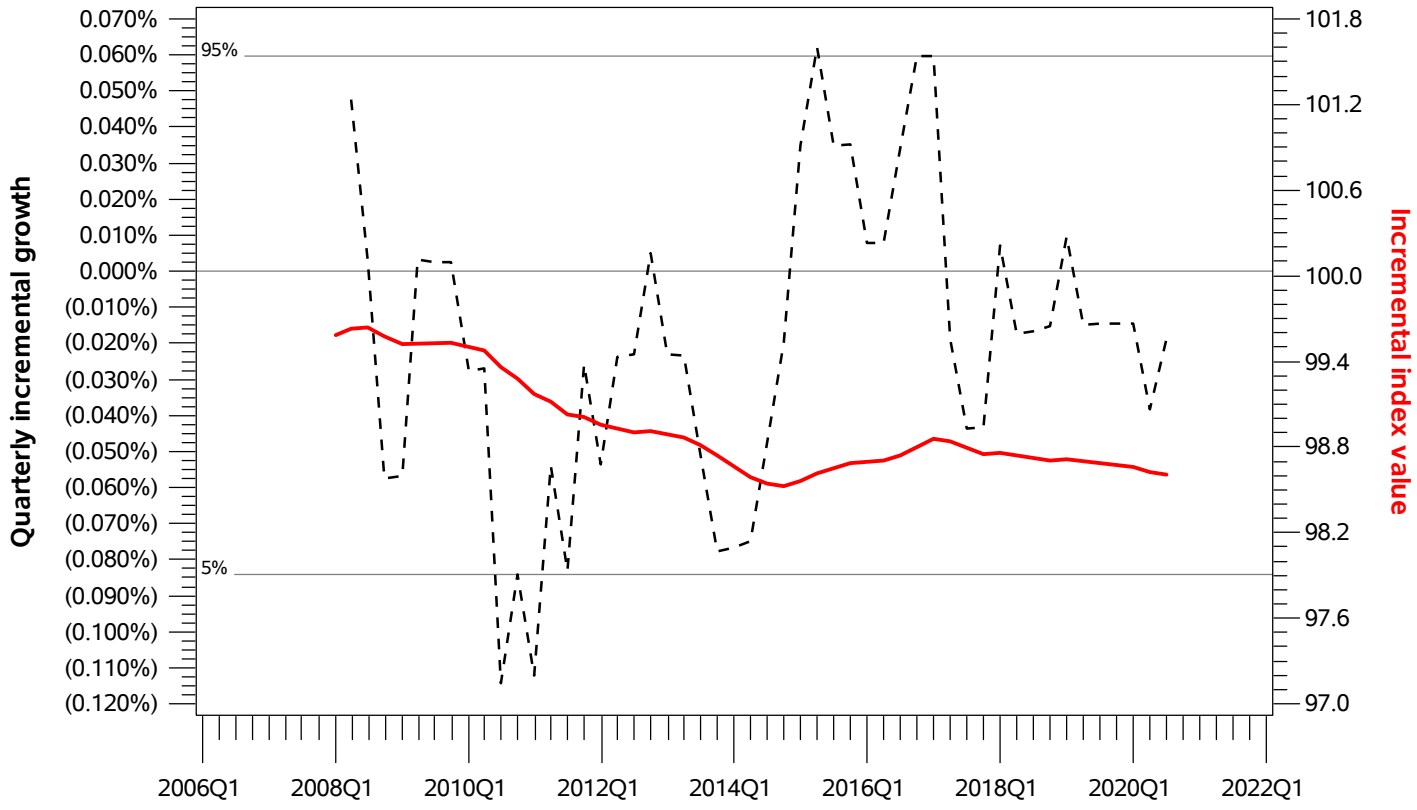


Table 79. ECI: COMP(S&L) Elementary and secondary schools incremental growth over ECI: COMP(S&L) All industries and occupations

LABSTAT series identifiers: CIS30161100000000I and CIS30100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-9.6379	Z_{Tau}	-2.4642
Prob Z_{Rho}	0.1274	Prob Z_{Tau}	0.1300

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0072	AR(1) coefficient	-0.7715
Standard error	0.0224	Standard error	0.0918
t-statistic	-0.3194	t-statistic	-8.4024
Probability t	0.7508	Durbin-Watson	2.1758

Estimated incremental annual growth rate: (0.029%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

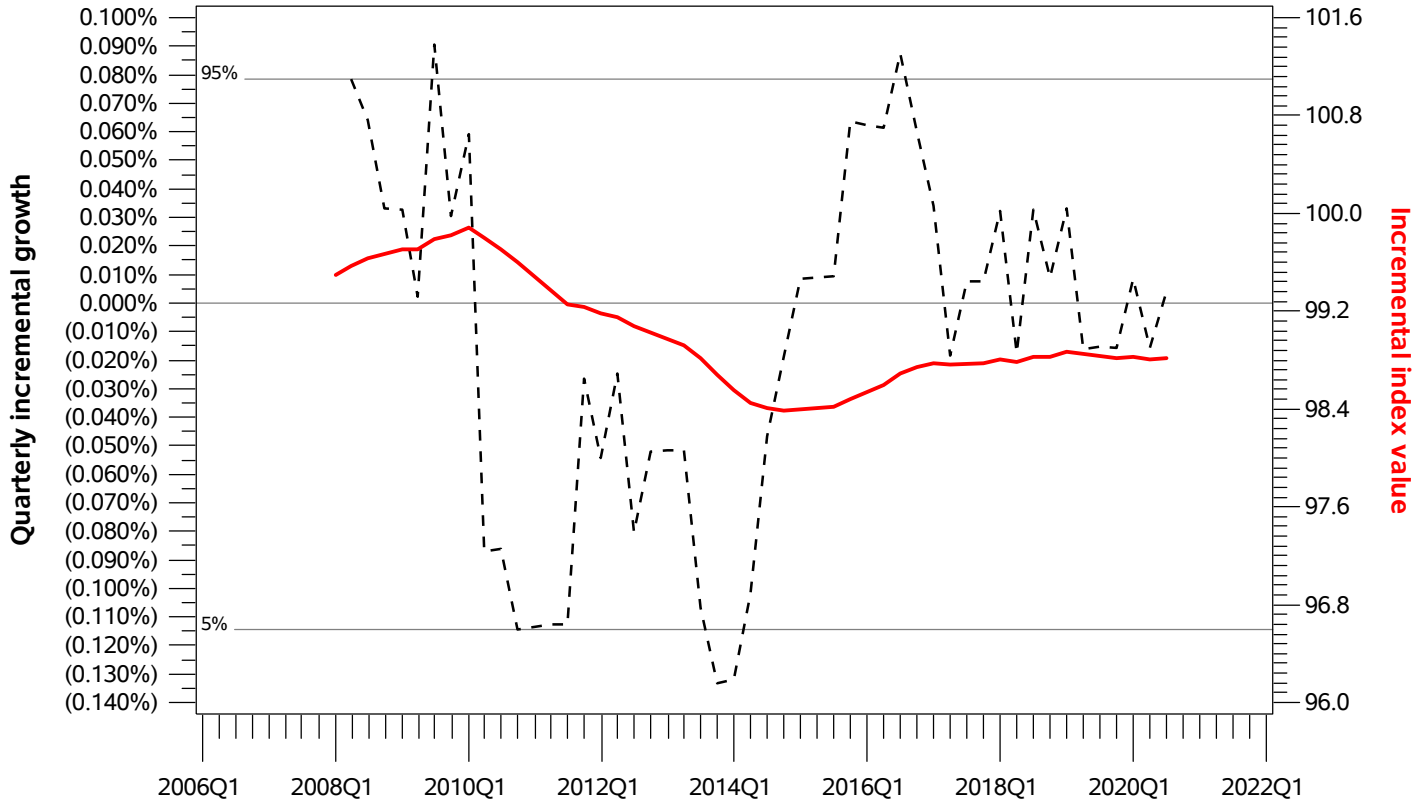


Table 80. ECI: COMP(S&L) Health care and social assistance incremental growth over ECI: COMP(S&L) All industries and occupations

LABSTAT series identifiers: CIS30162000000000I and CIS30100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-24.9227	Z_{Tau}	-3.9678
Prob Z_{Rho}	0.0012	Prob Z_{Tau}	0.0031

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0069	AR(1) coefficient	-0.5175
Standard error	0.0282	Standard error	0.1235
t-statistic	0.2435	t-statistic	-4.1902
Probability t	0.8087	Durbin-Watson	1.8078

Estimated incremental annual growth rate: 0.027%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

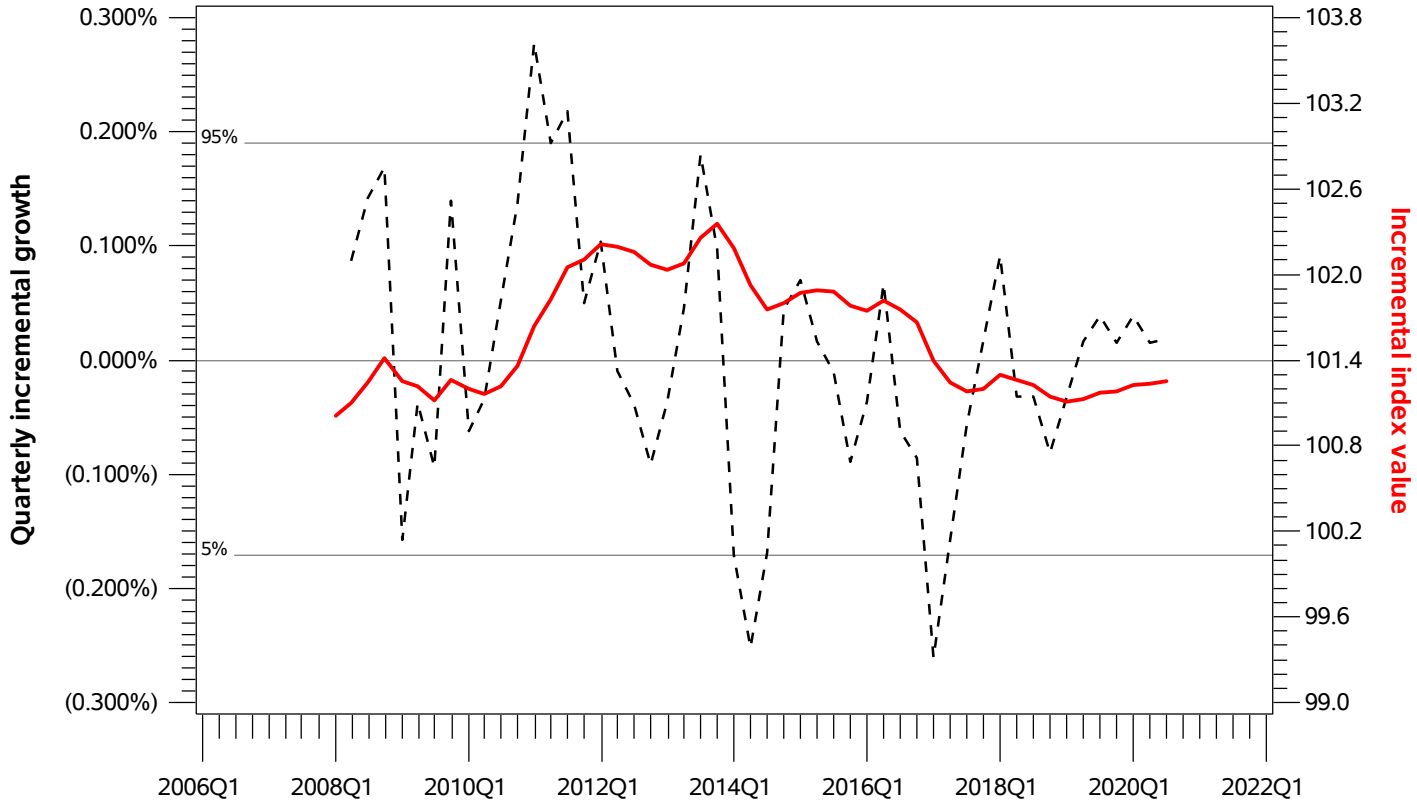


Table 81. ECI: COMP(S&L) Hospitals incremental growth over ECI: COMP(S&L) All industries and occupations

LABSTAT series identifiers: CIS30162200000000I and CIS30100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-15.6501	Z_{Tau}	-2.9250
Prob Z_{Rho}	0.0232	Prob Z_{Tau}	0.0494

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0115	AR(1) coefficient	-0.7223
Standard error	0.0421	Standard error	0.0998
t-statistic	-0.2739	t-statistic	-7.2369
Probability t	0.7854	Durbin-Watson	1.6432

Estimated incremental annual growth rate: (0.046%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

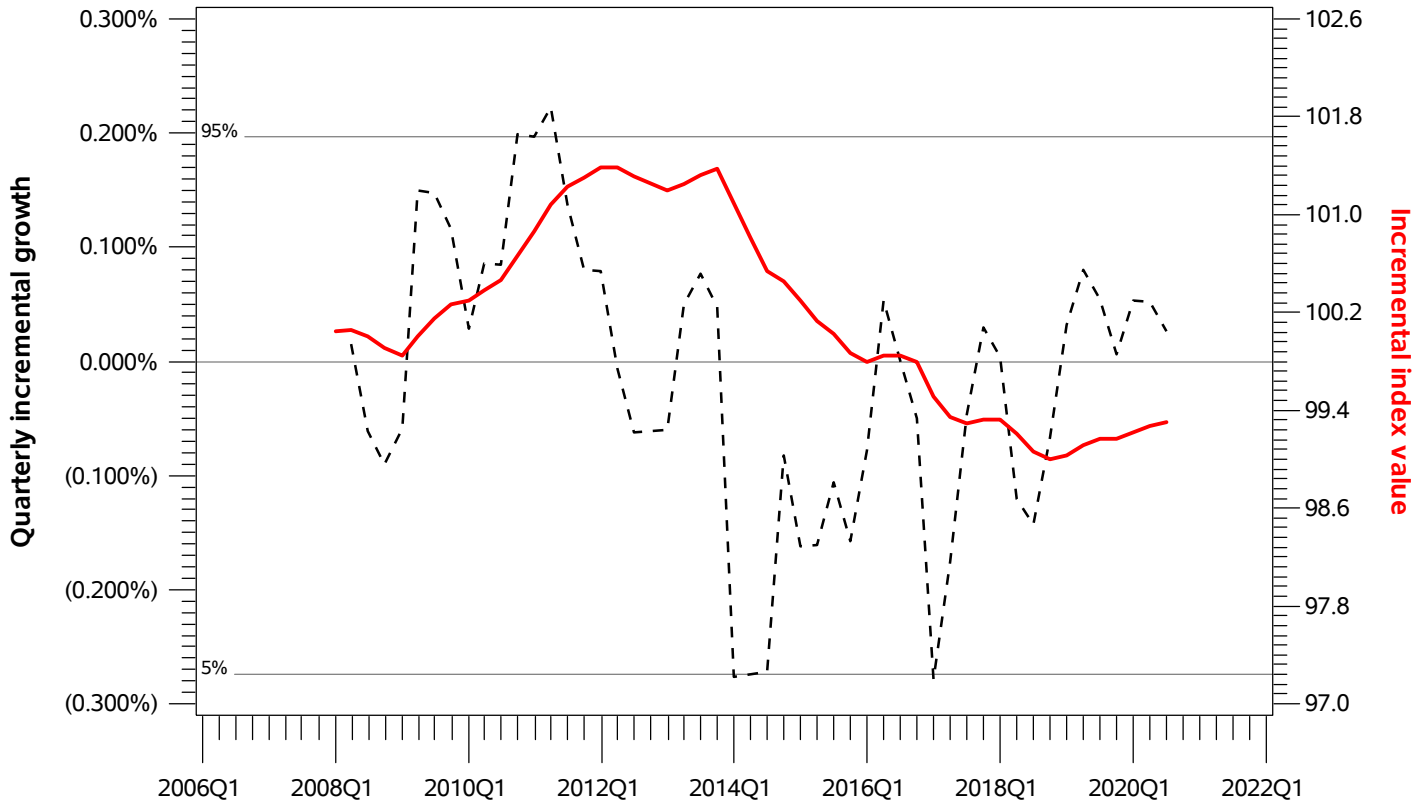


Table 82. ECI: COMP(S&L) Public administration incremental growth over ECI: COMP(S&L) All industries and occupations

LABSTAT series identifiers: CIS30192000000000I and CIS30100000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.5603	Z_{Tau}	-3.7353
Prob Z_{Rho}	0.0037	Prob Z_{Tau}	0.0061

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0118	AR(1) coefficient	-0.5599
Standard error	0.0155	Standard error	0.1196
t-statistic	0.7613	t-statistic	-4.6818
Probability t	0.4502	Durbin-Watson	1.8982

Estimated incremental annual growth rate: 0.047%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

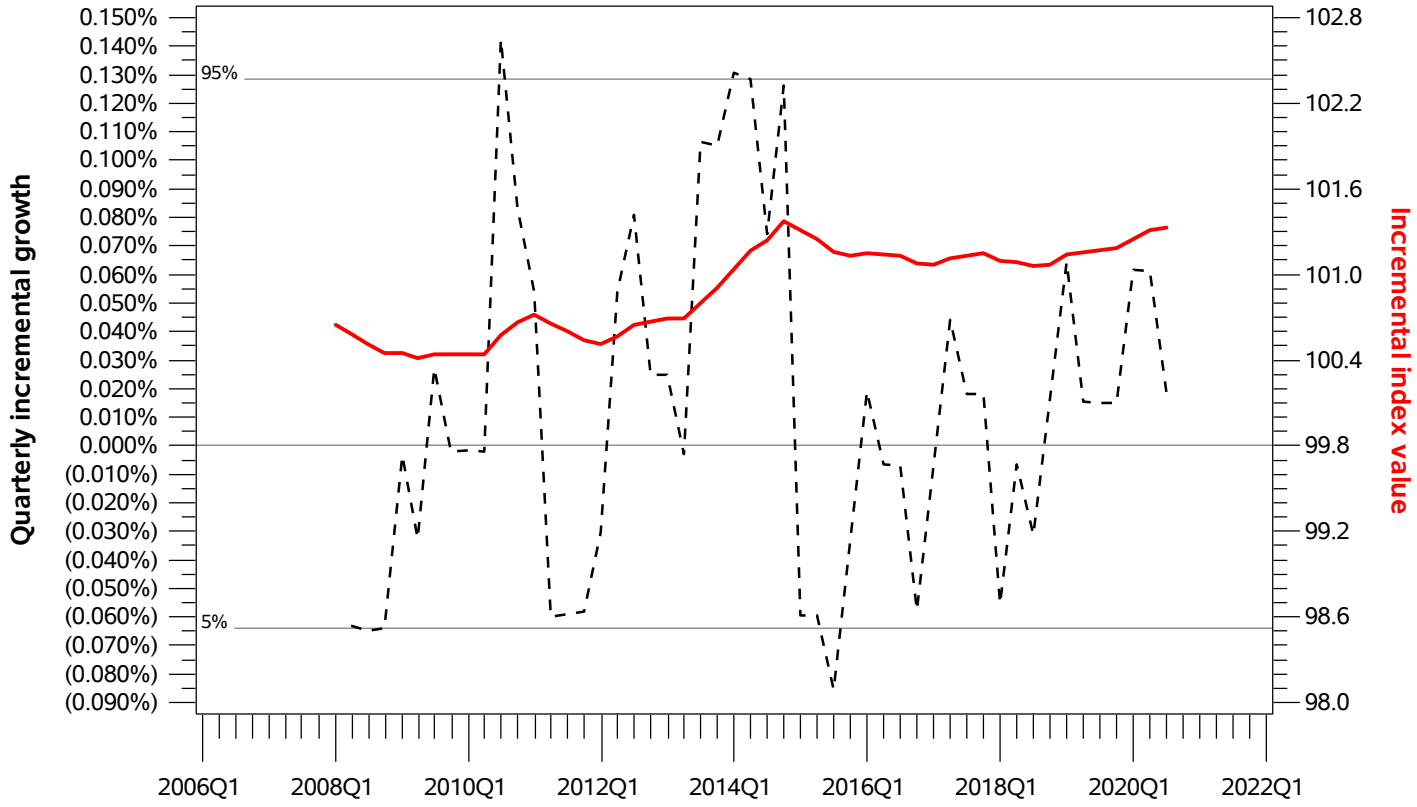


Table 83. ECI: W&S(S&L) Education and health services incremental growth over ECI: W&S(S&L) All industries and occupations

LABSTAT series identifiers: CIS30260000000000I and CIS30200000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-32.3495	Z_{Tau}	-4.7829
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0003

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0136	AR(1) coefficient	-0.3764
Standard error	0.0060	Standard error	0.1337
t-statistic	-2.2475	t-statistic	-2.8147
Probability t	0.0292	Durbin-Watson	1.6662

Estimated incremental annual growth rate: (0.054%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (0.054%)

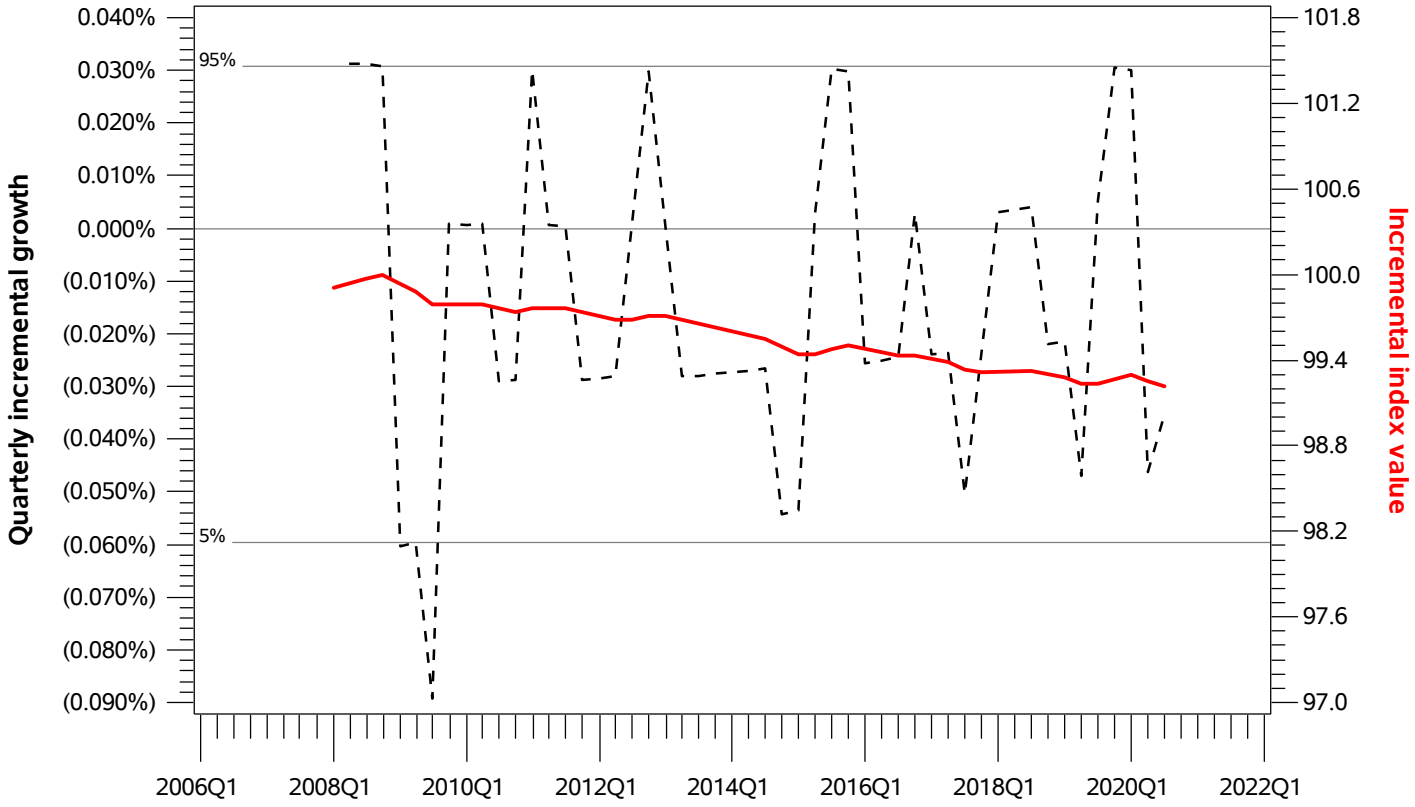


Table 84. ECI: W&S(S&L) Education services incremental growth over ECI: W&S(S&L) All industries and occupations

LABSTAT series identifiers: CIS30261000000000I and CIS30200000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-28.6125	Z_{Tau}	-4.4364
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0008

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0168	AR(1) coefficient	-0.4500
Standard error	0.0067	Standard error	0.1289
t-statistic	-2.5110	t-statistic	-3.4911
Probability t	0.0155	Durbin-Watson	1.6454

Estimated incremental annual growth rate: (0.067%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (0.067%)

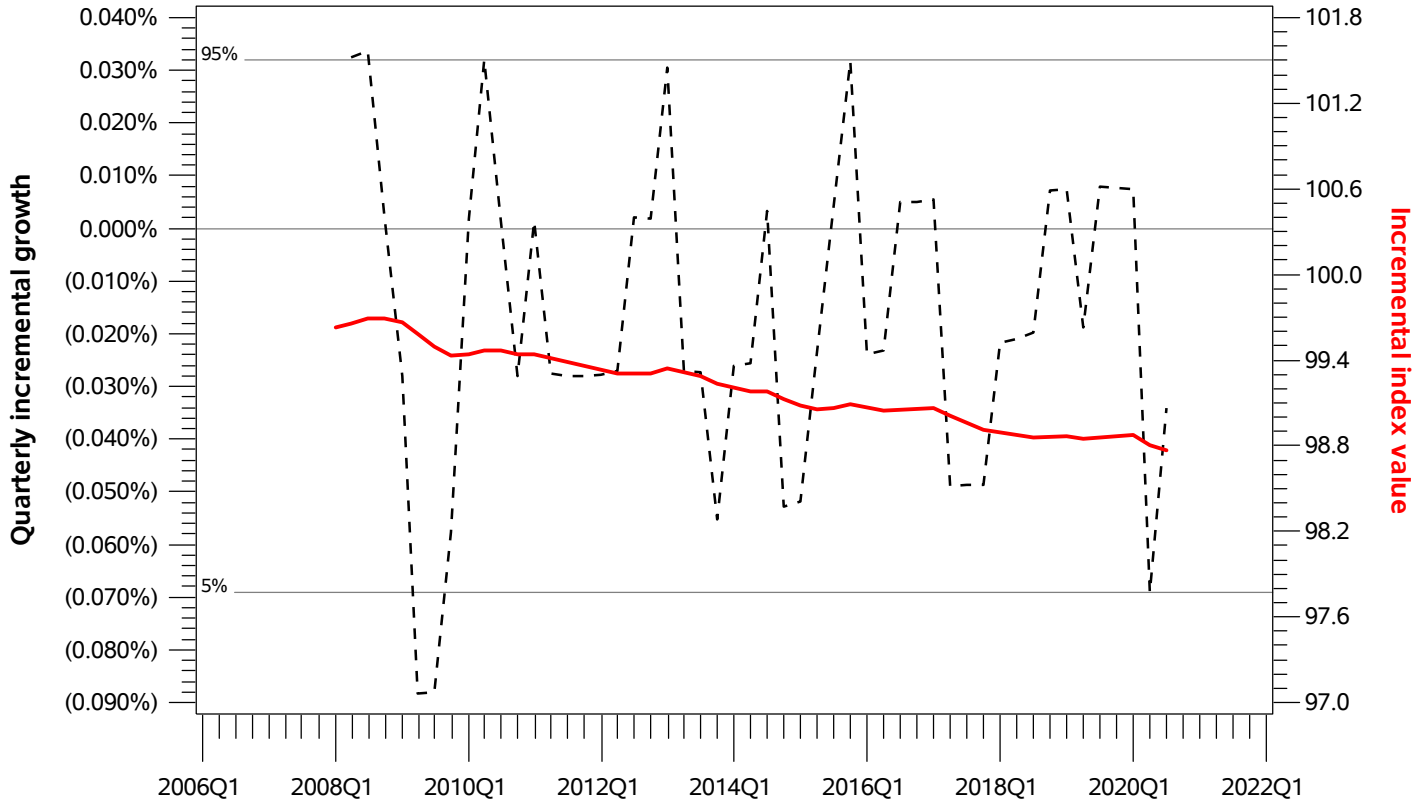


Table 85. ECI: W&S(S&L) Schools incremental growth over ECI: W&S(S&L) All industries and occupations

LABSTAT series identifiers: CIS30261050000000I and CIS30200000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-28.8622	Z_{Tau}	-4.4309
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0008

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0168	AR(1) coefficient	-0.4509
Standard error	0.0071	Standard error	0.1288
t-statistic	-2.3621	t-statistic	-3.5003
Probability t	0.0223	Durbin-Watson	1.6356

Estimated incremental annual growth rate: (0.067%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (0.067%)

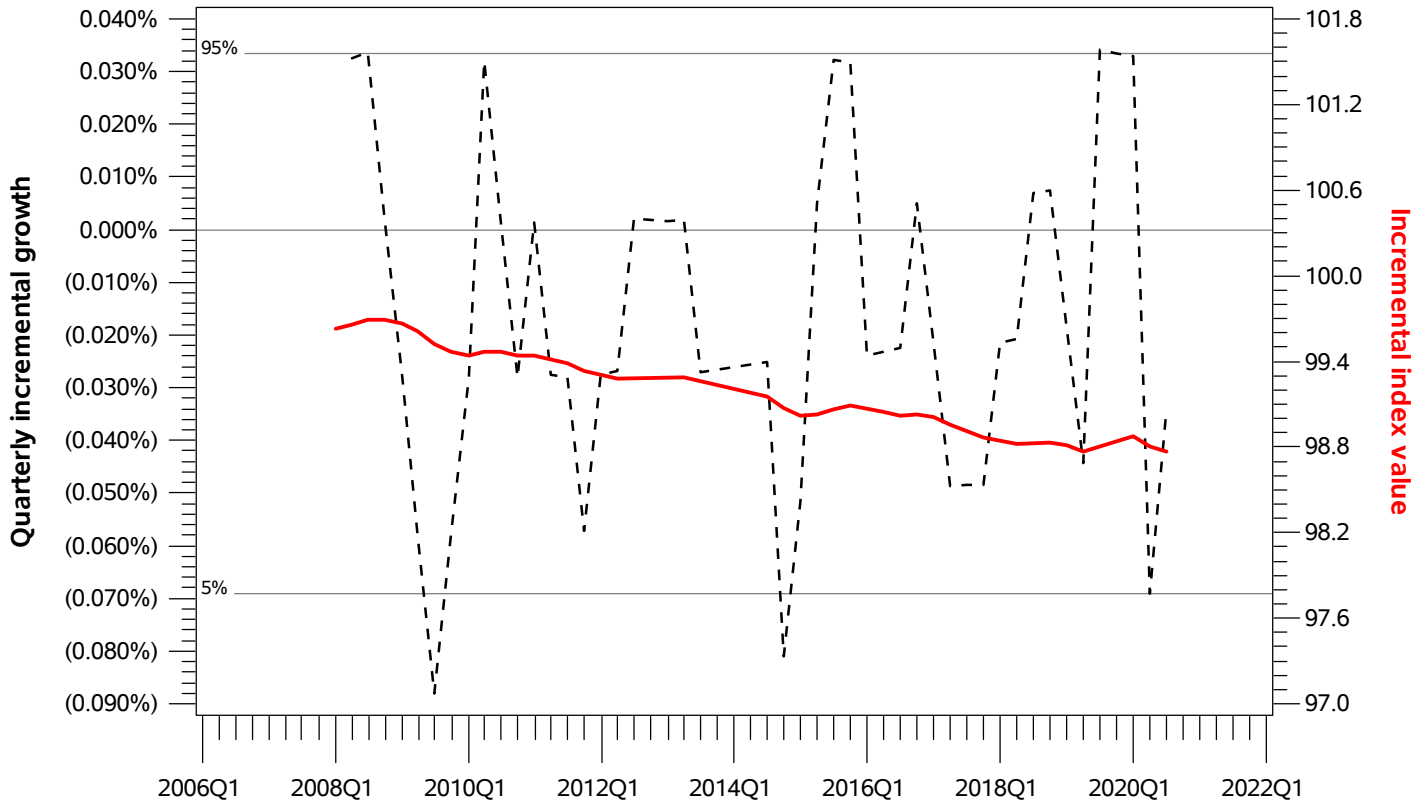


Table 86. ECI: W&S(S&L) Elementary and secondary schools incremental growth over ECI: W&S(S&L) All industries and occupations

LABSTAT series identifiers: CIS30261100000000I and CIS30200000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-20.6188	Z_{Tau}	-3.6311
Prob Z_{Rho}	0.0050	Prob Z_{Tau}	0.0082

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0187	AR(1) coefficient	-0.5865
Standard error	0.0132	Standard error	0.1169
t-statistic	-1.4091	t-statistic	-5.0163
Probability t	0.1652	Durbin-Watson	1.8535

Estimated incremental annual growth rate: (0.075%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

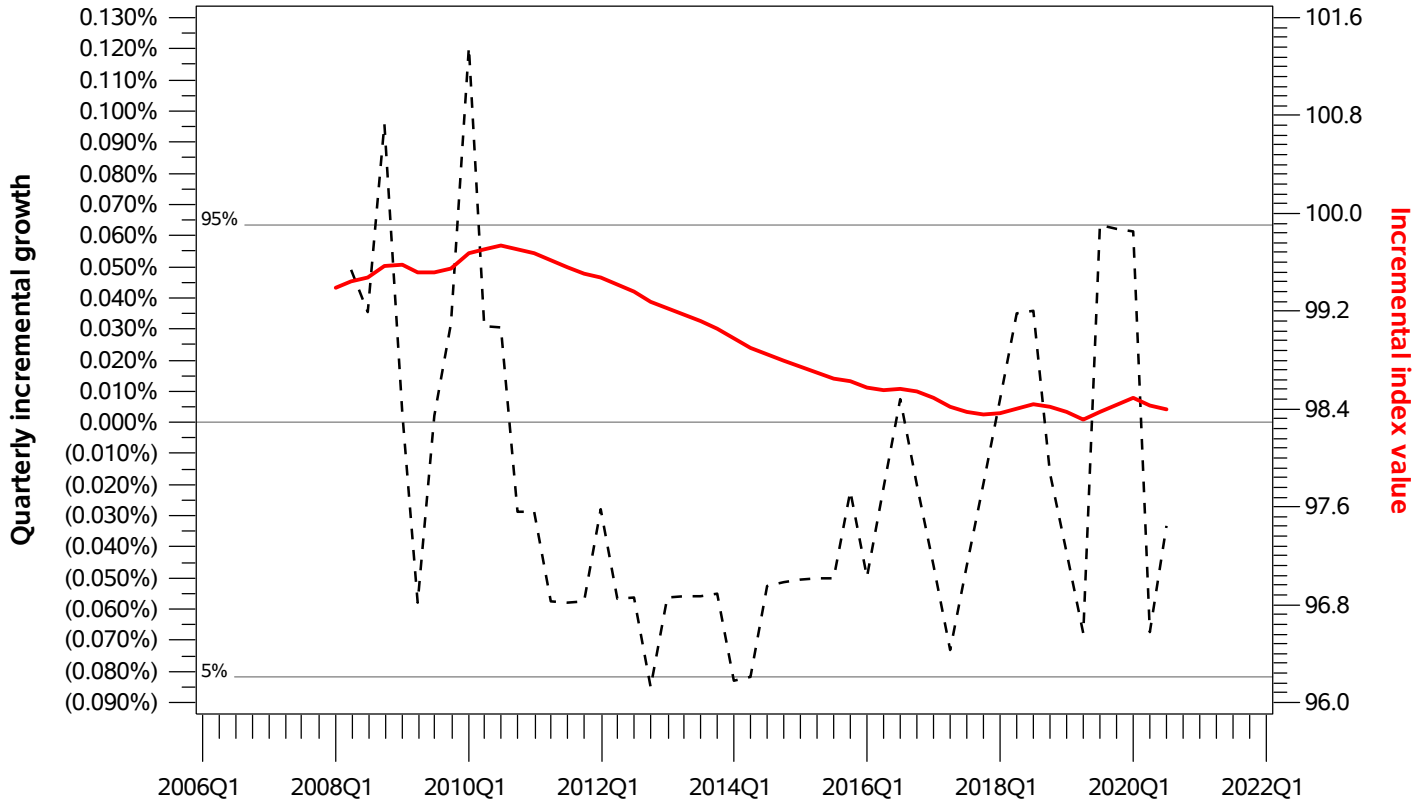


Table 87. ECI: W&S(S&L) Health care and social assistance incremental growth over ECI: W&S(S&L) All industries and occupations

LABSTAT series identifiers: CIS30262000000000I and CIS30200000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-31.5544	Z_{Tau}	-4.8031
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0003

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0190	AR(1) coefficient	-0.3443
Standard error	0.0198	Standard error	0.1355
t-statistic	0.9621	t-statistic	-2.5411
Probability t	0.3408	Durbin-Watson	1.9786

Estimated incremental annual growth rate: 0.076%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

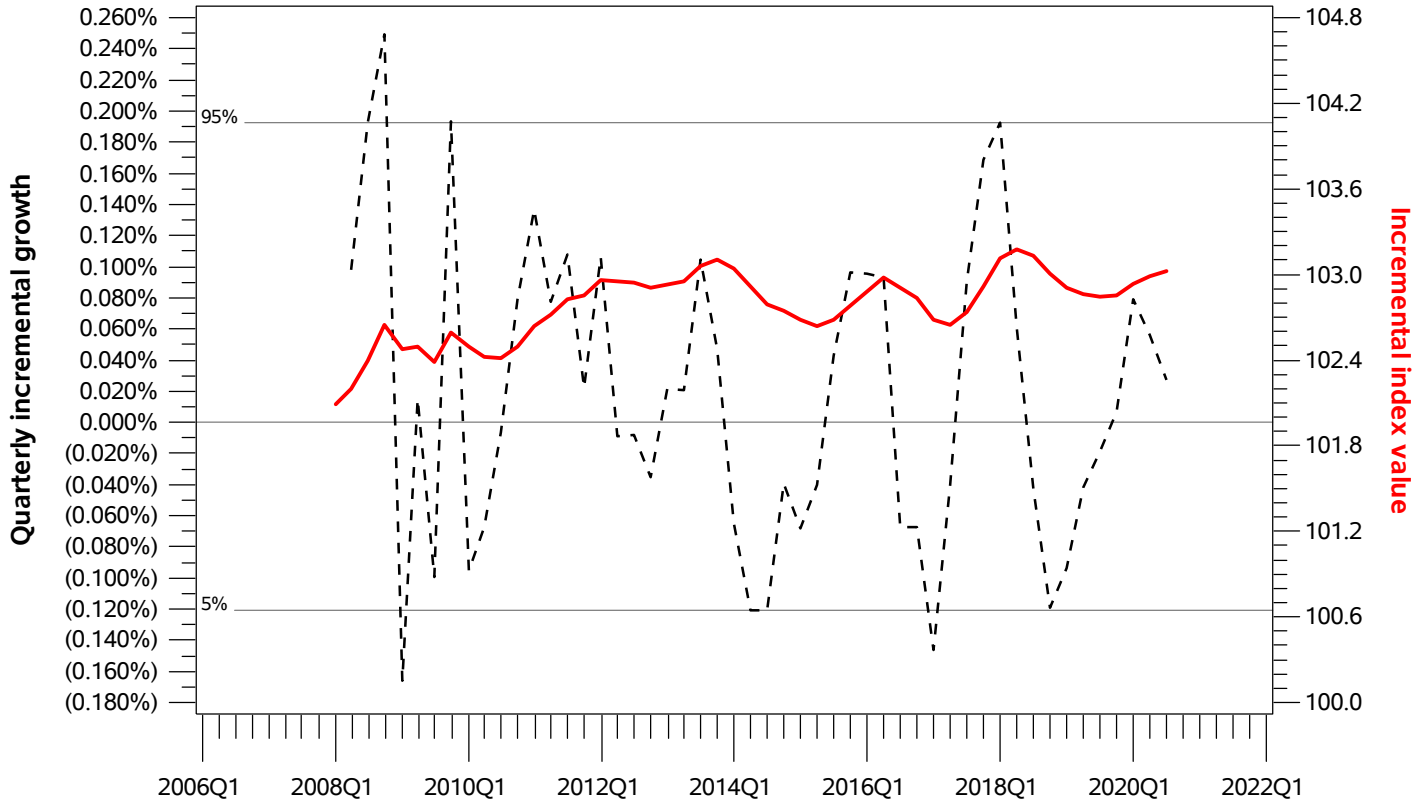


Table 88. ECI: W&S(S&L) Hospitals incremental growth over ECI: W&S(S&L) All industries and occupations

LABSTAT series identifiers: CIS30262200000000I and CIS30200000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.6283	Z_{Tau}	-3.3534
Prob Z_{Rho}	0.0068	Prob Z_{Tau}	0.0173

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0146	AR(1) coefficient	-0.6229
Standard error	0.0283	Standard error	0.1129
t-statistic	0.5179	t-statistic	-5.5171
Probability t	0.6069	Durbin-Watson	1.7962

Estimated incremental annual growth rate: 0.059%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

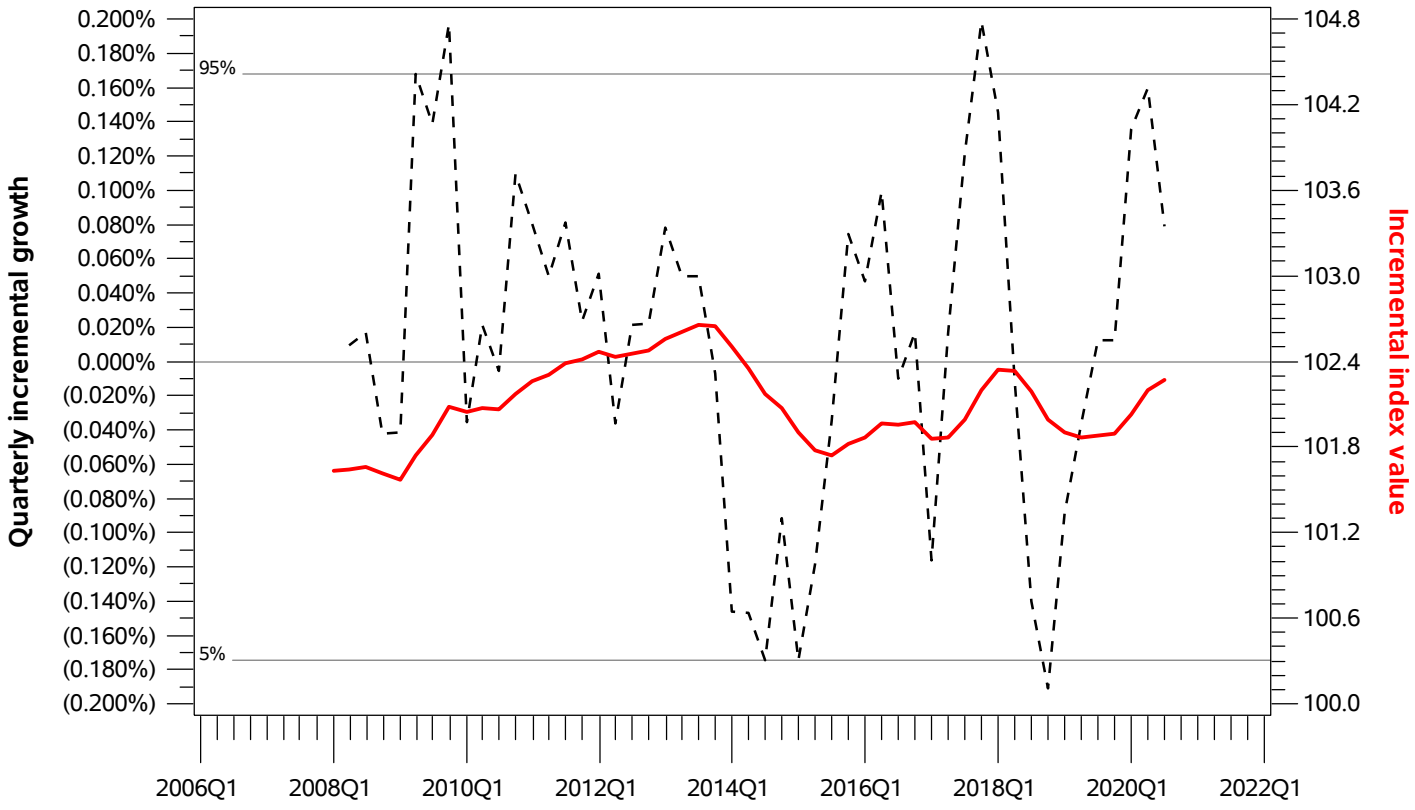


Table 89. ECI: W&S(S&L) Public administration incremental growth over ECI: W&S(S&L) All industries and occupations

LABSTAT series identifiers: CIS30292000000000I and CIS30200000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-28.6967	Z_{Tau}	-4.6348
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0005

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0117	AR(1) coefficient	-0.4009
Standard error	0.0112	Standard error	0.1322
t-statistic	1.0516	t-statistic	-3.0321
Probability t	0.2982	Durbin-Watson	1.9180

Estimated incremental annual growth rate: 0.047%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

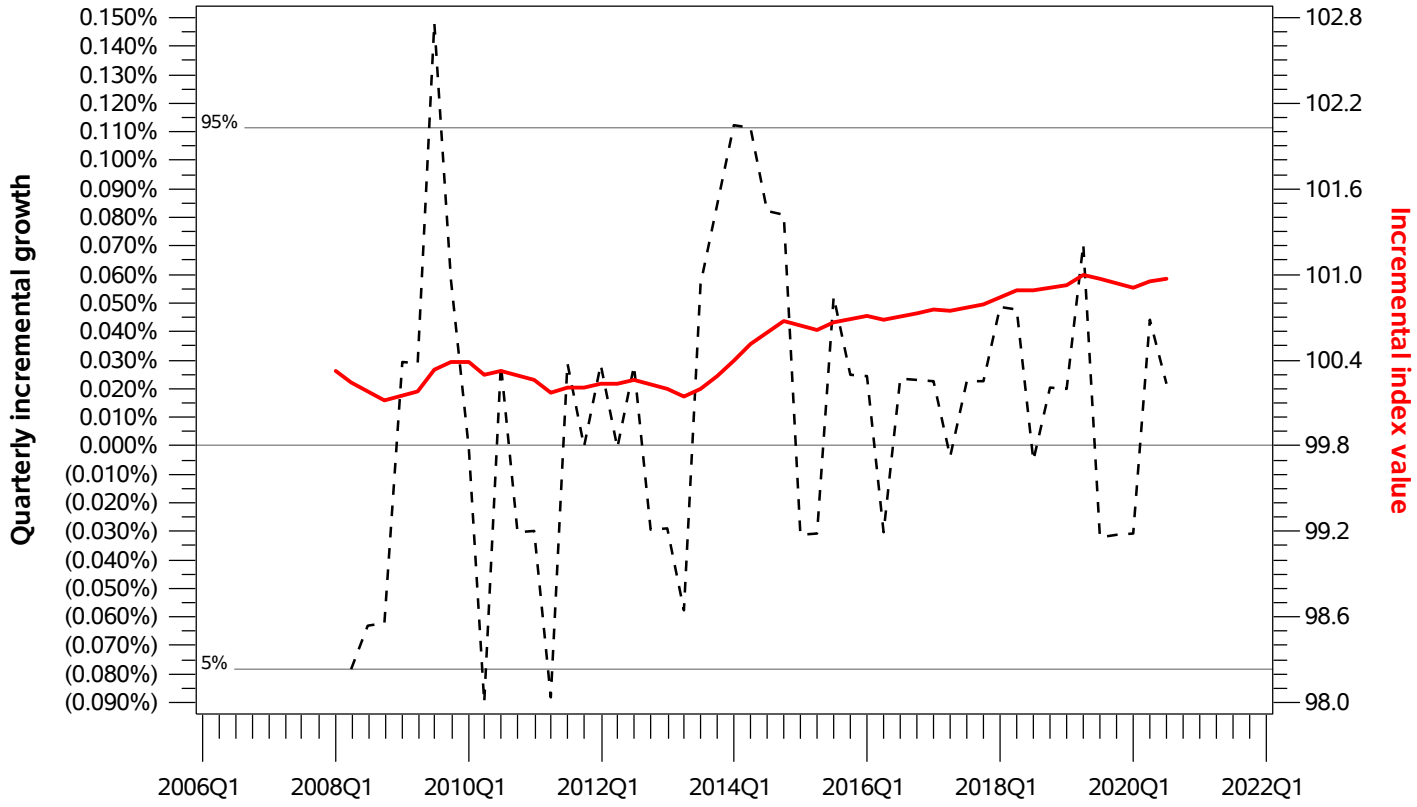


Table 90. ECI: W&S(PRIV) Wholesale trade incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIU2024110000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-23.7729	Z_{Tau}	-3.8851
Prob Z_{Rho}	0.0018	Prob Z_{Tau}	0.0040

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0426	AR(1) coefficient	-0.5093
Standard error	0.0874	Standard error	0.1242
t-statistic	-0.4878	t-statistic	-4.1006
Probability t	0.6279	Durbin-Watson	1.9981

Estimated incremental annual growth rate: (0.170%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

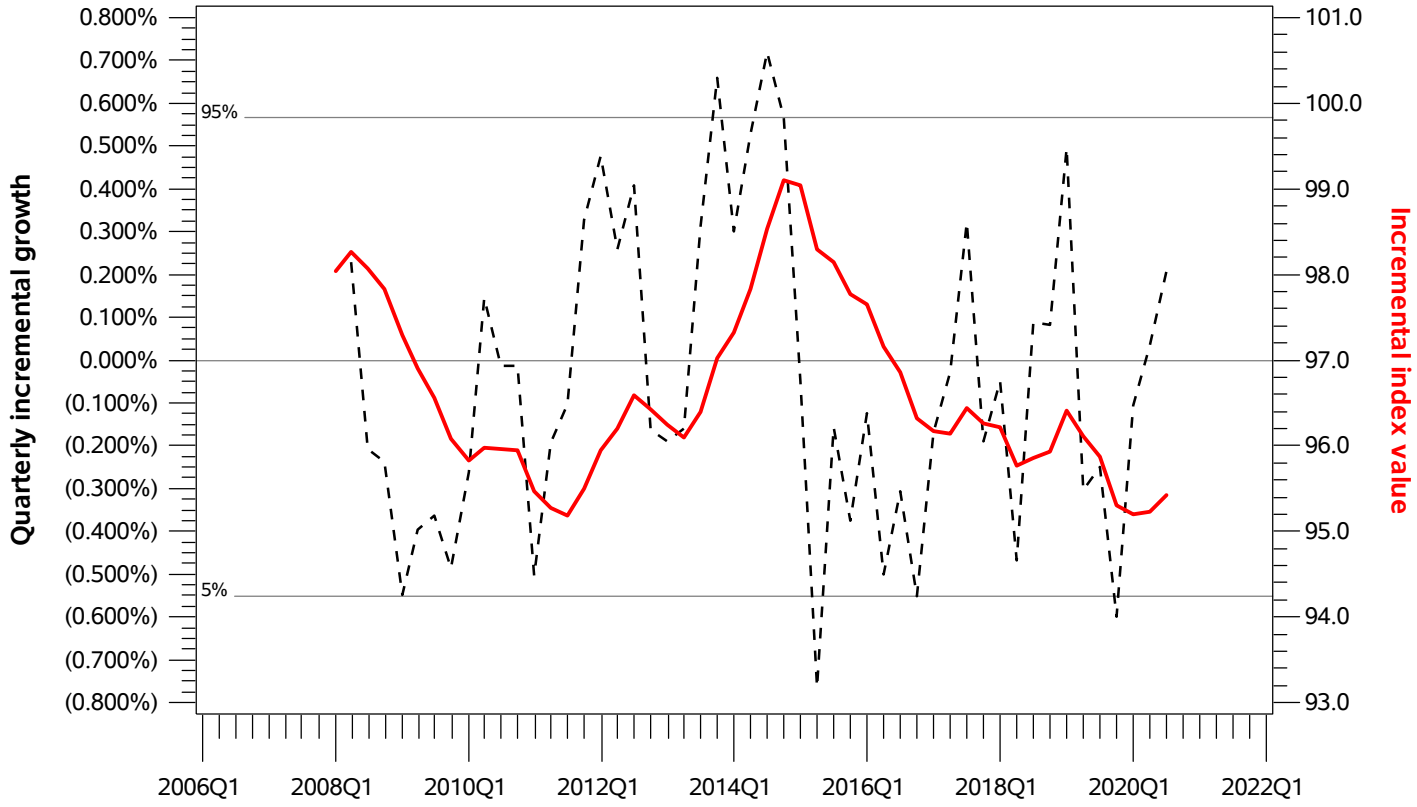


Table 91. ECI: W&S(PRIV) Real estate and rental and leasing incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIU2025300000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-27.8394	Z_{Tau}	-4.2199
Prob Z_{Rho}	0.0004	Prob Z_{Tau}	0.0015

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0036	AR(1) coefficient	-0.4669
Standard error	0.0465	Standard error	0.1276
t-statistic	-0.0768	t-statistic	-3.6581
Probability t	0.9391	Durbin-Watson	1.8004

Estimated incremental annual growth rate: (0.014%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

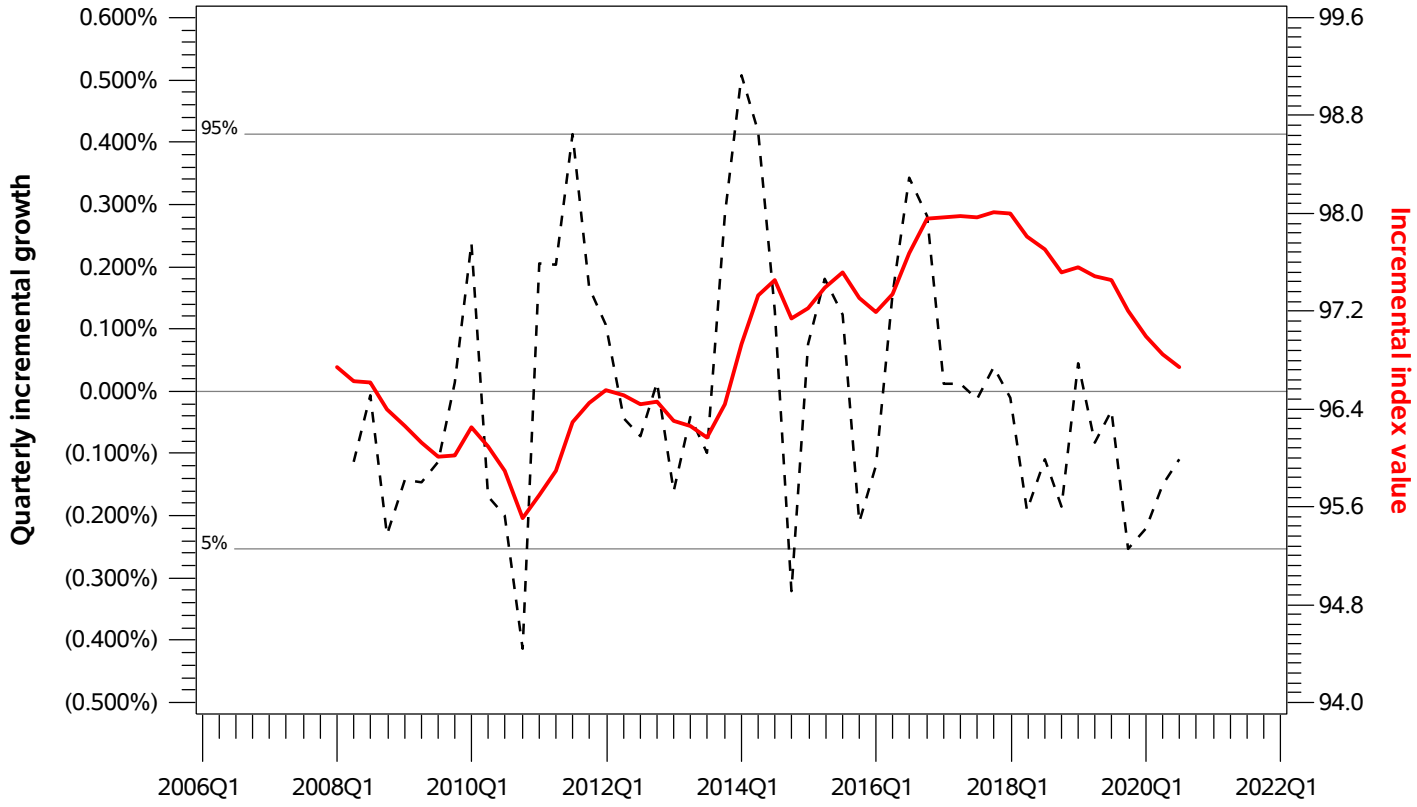


Table 92. ECI: W&S(PRIV) Nursing and residential care facilities incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIU20262300000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-12.4949	Z_{Tau}	-2.5365
Prob Z_{Rho}	0.0580	Prob Z_{Tau}	0.1129

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0465	AR(1) coefficient	-0.7666
Standard error	0.0532	Standard error	0.0927
t-statistic	-0.8738	t-statistic	-8.2724
Probability t	0.3866	Durbin-Watson	1.6439

Estimated incremental annual growth rate: (0.186%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

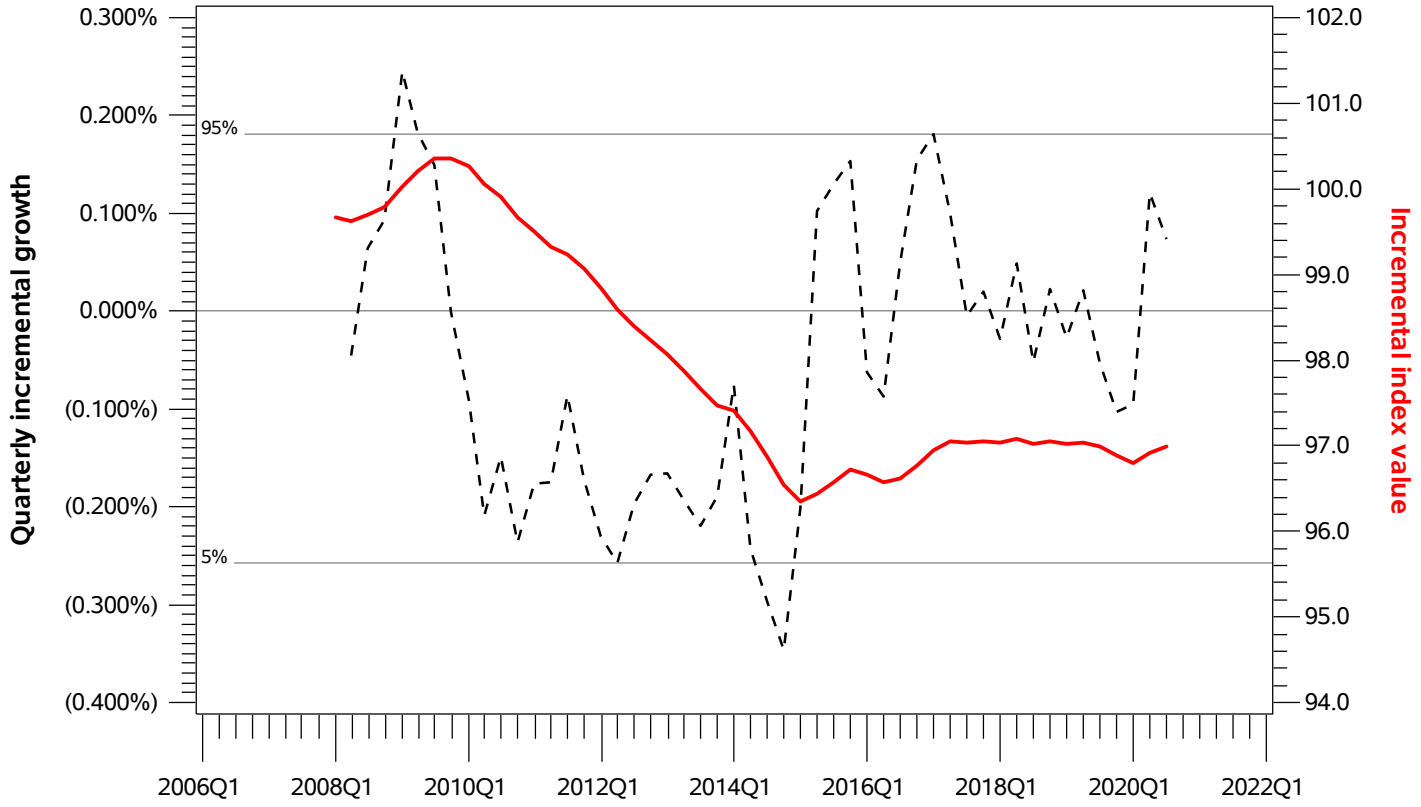


Table 93. ECI: W&S(PRIV) Accommodations and food service incremental growth over ECI: W&S(PRIV) Service-providing industries

LABSTAT series identifiers: CIU2027200000000I and CIS202S000000000I
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-11.7440	Z_{Tau}	-2.6167
Prob Z_{Rho}	0.0715	Prob Z_{Tau}	0.0962

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0490	AR(1) coefficient	-0.6999
Standard error	0.0859	Standard error	0.1031
t-statistic	0.5706	t-statistic	-6.7896
Probability t	0.5710	Durbin-Watson	2.4324

Estimated incremental annual growth rate: 0.196%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

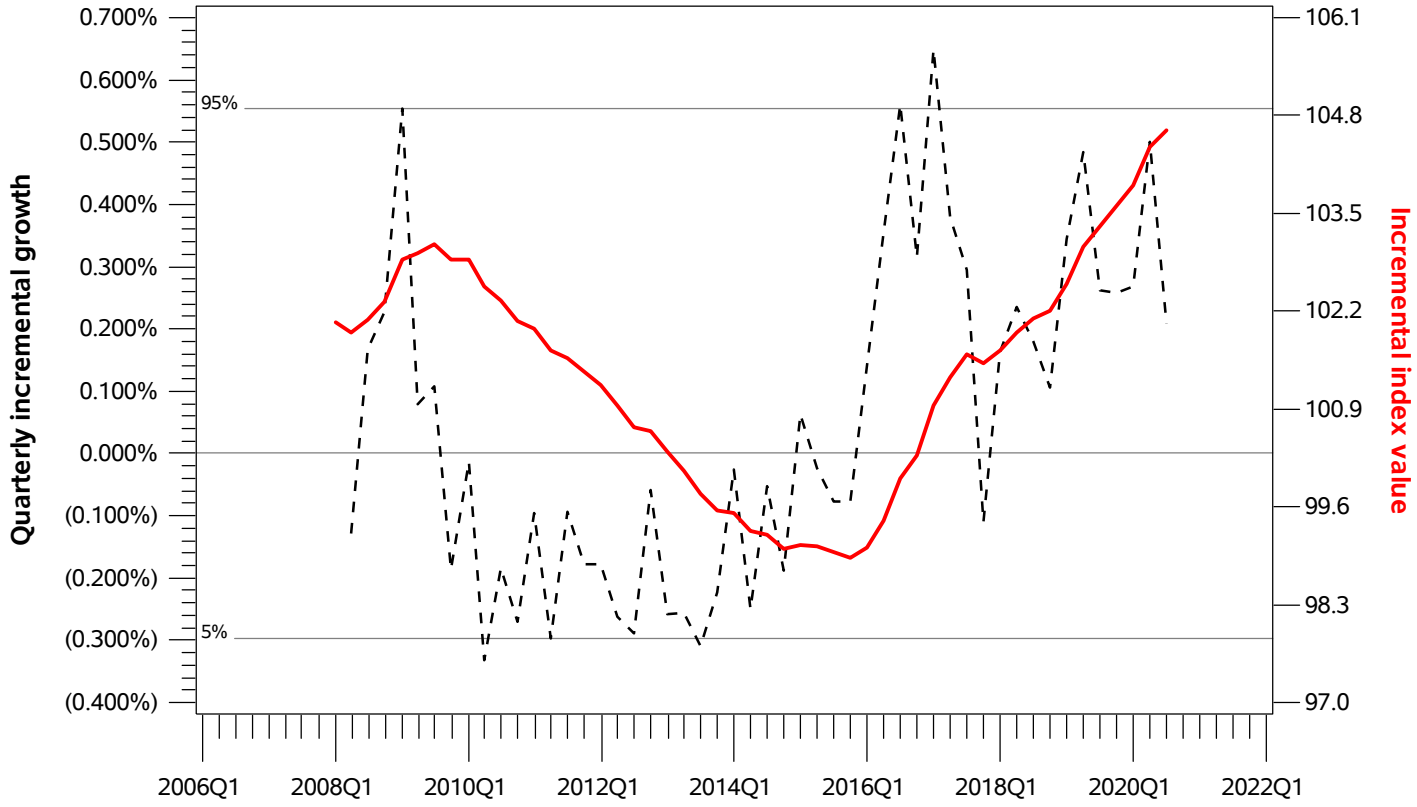


Table 94. CPI-U: Physicians services incremental growth over CPI-U: Professional Services

LABSTAT series identifiers: CUSR0000SEMC01 and CUSR0000SEMC

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-15.6810	Z_{Tau}	-2.9442
Prob Z_{Rho}	0.0230	Prob Z_{Tau}	0.0473

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0070	AR(1) coefficient	-0.7246
Standard error	0.0488	Standard error	0.0995
t-statistic	-0.1434	t-statistic	-7.2833
Probability t	0.8865	Durbin-Watson	1.6108

Estimated incremental annual growth rate: (0.028%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

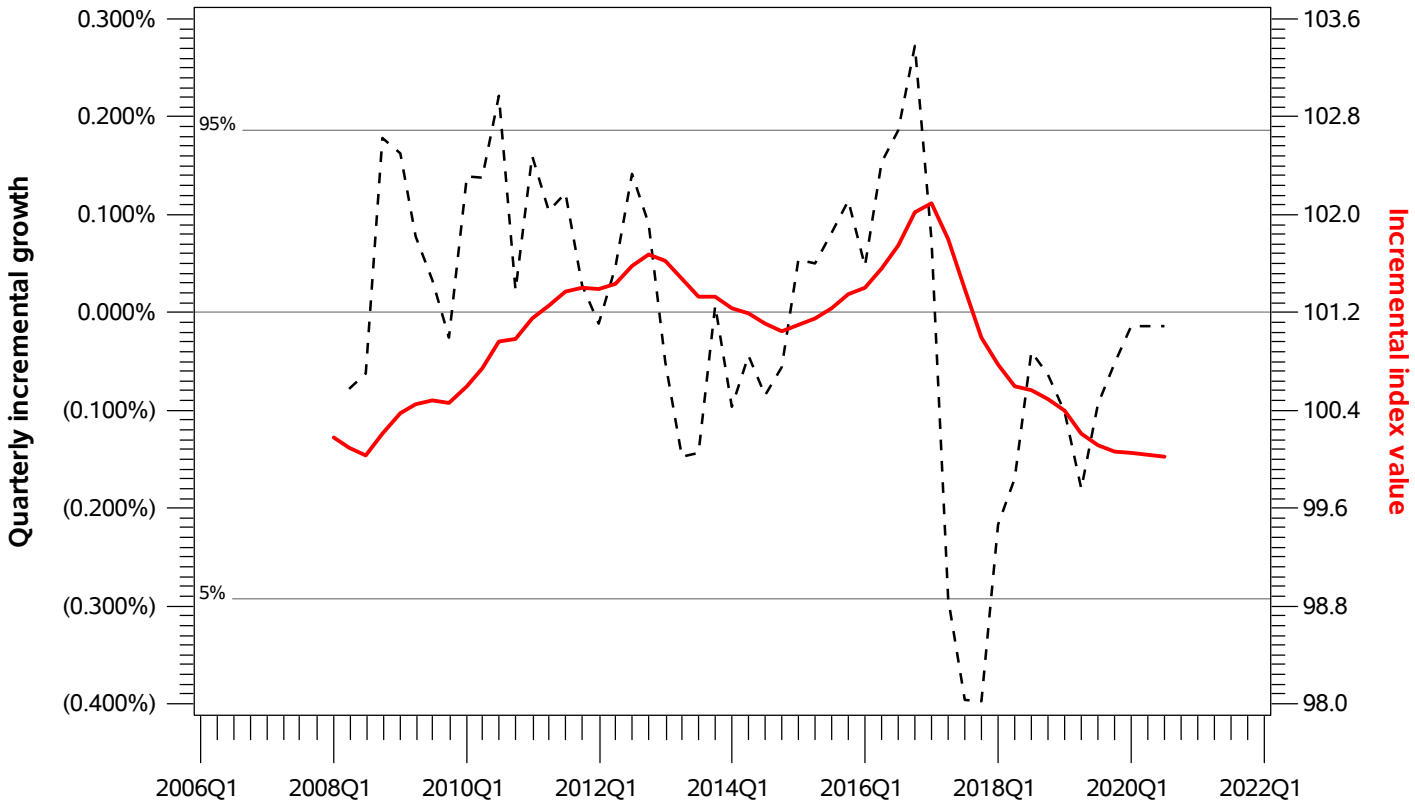


Table 95. CPI-U: Dental services incremental growth over CPI-U: Professional Services

LABSTAT series identifiers: CUSR0000SEMC02 and CUSR0000SEMC
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.6115	Z_{Tau}	-3.4328
Prob Z_{Rho}	0.0069	Prob Z_{Tau}	0.0141

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.1526	AR(1) coefficient	-0.5928
Standard error	0.0530	Standard error	0.1162
t-statistic	2.8787	t-statistic	-5.1001
Probability t	0.0059	Durbin-Watson	2.0242

Estimated incremental annual growth rate: 0.612%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.612%

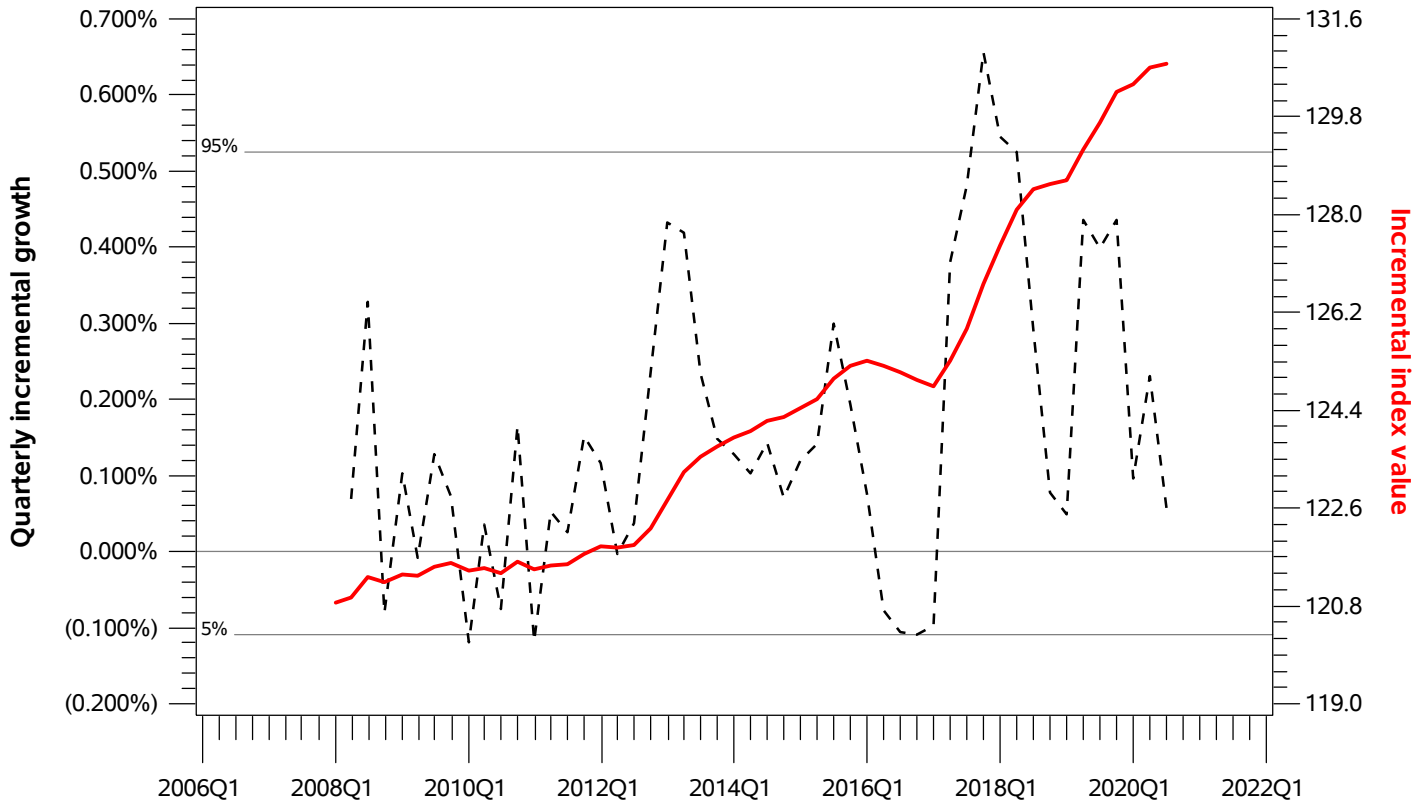


Table 96. CPI-U: Eyeglasses and eye care incremental growth over CPI-U: Professional Services

LABSTAT series identifiers: CUSR0000SEMC03 and CUSR0000SEMC
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-26.4258	Z_{Tau}	-4.0525
Prob Z_{Rho}	0.0007	Prob Z_{Tau}	0.0024

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.2619	AR(1) coefficient	-0.5068
Standard error	0.0904	Standard error	0.1244
t-statistic	-2.8965	t-statistic	-4.0725
Probability t	0.0057	Durbin-Watson	1.8031

Estimated incremental annual growth rate: (1.044%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (1.044%)

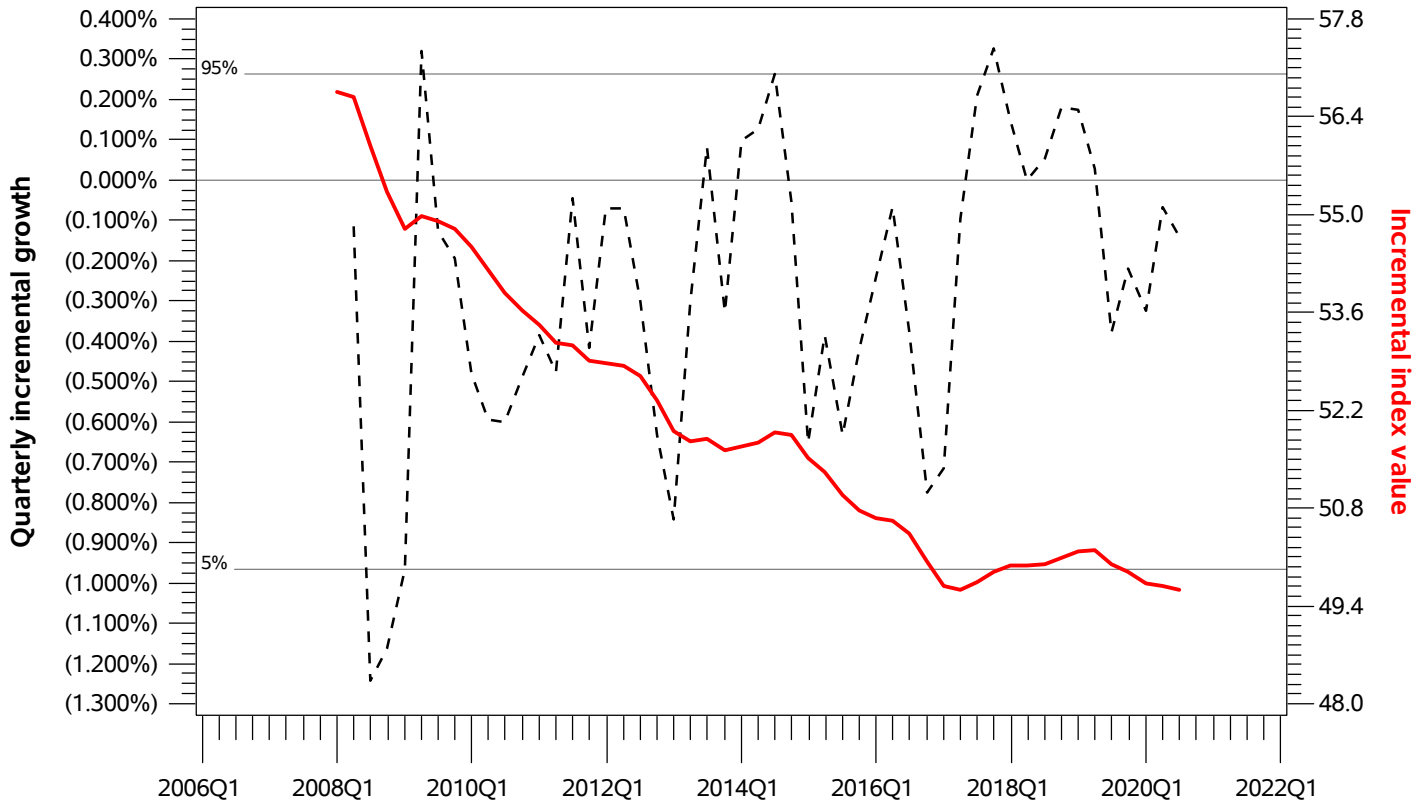


Table 97. CPI-U: Services by other medical professionals incremental growth over CPI-U: Professional Services

LABSTAT series identifiers: CUSR0000SEMC04 and CUSR0000SEMC
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-19.8969	Z_{Tau}	-3.5093
Prob Z_{Rho}	0.0063	Prob Z_{Tau}	0.0115

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0924	AR(1) coefficient	-0.6344
Standard error	0.0798	Standard error	0.1116
t-statistic	-1.1578	t-statistic	-5.6859
Probability t	0.2527	Durbin-Watson	1.5229

Estimated incremental annual growth rate: (0.369%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

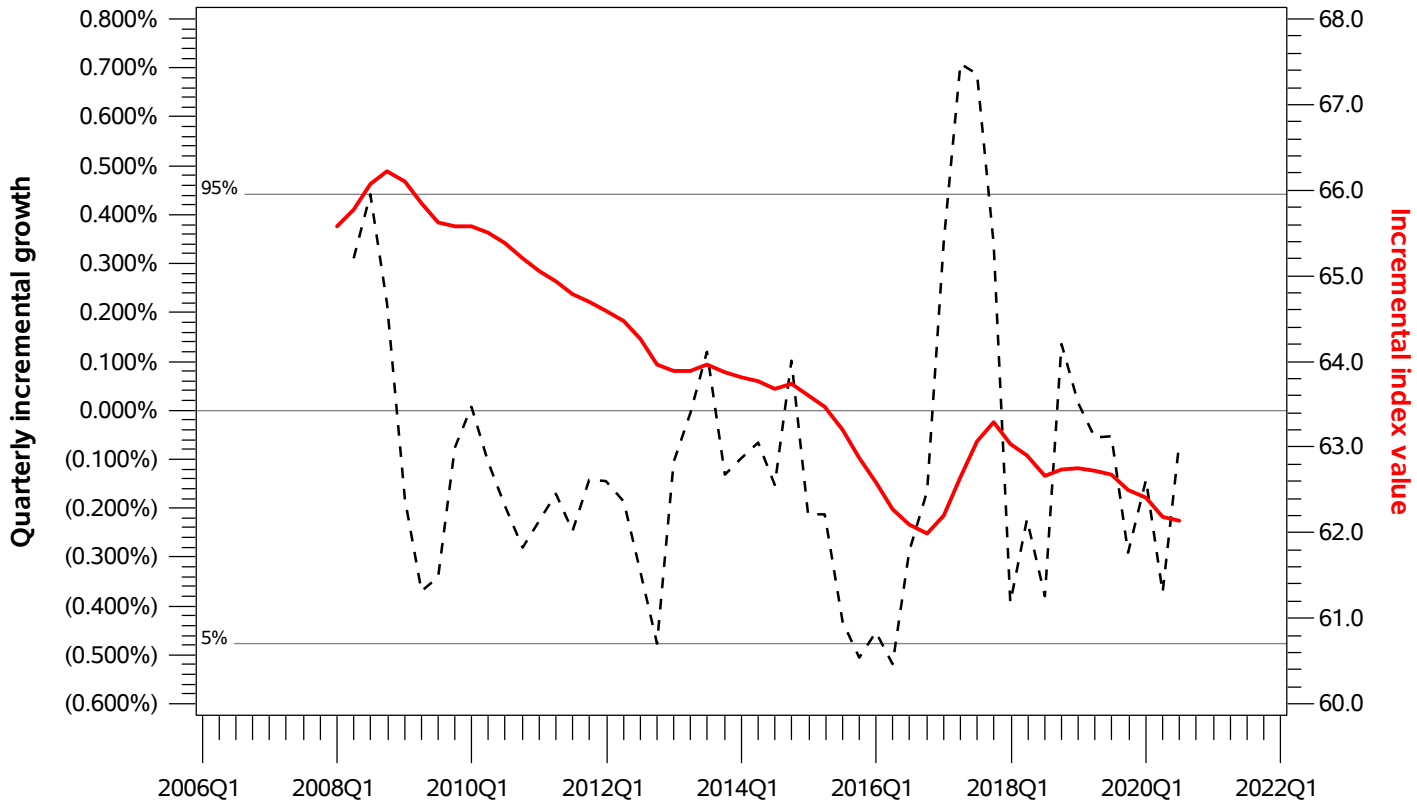


Table 98. CPI-U: Hospital services incremental growth over CPI-U: Hospital and Related Services

LABSTAT series identifiers: CUSR0000SEMD01 and CUSR0000SEMD
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-10.0404	Z_{Tau}	-2.2822
Prob Z_{Rho}	0.1142	Prob Z_{Tau}	0.1813

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0731	AR(1) coefficient	-0.7068
Standard error	0.0200	Standard error	0.1021
t-statistic	3.6542	t-statistic	-6.9215
Probability t	0.0006	Durbin-Watson	2.3813

Estimated incremental annual growth rate: 0.293%

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: 0.293%

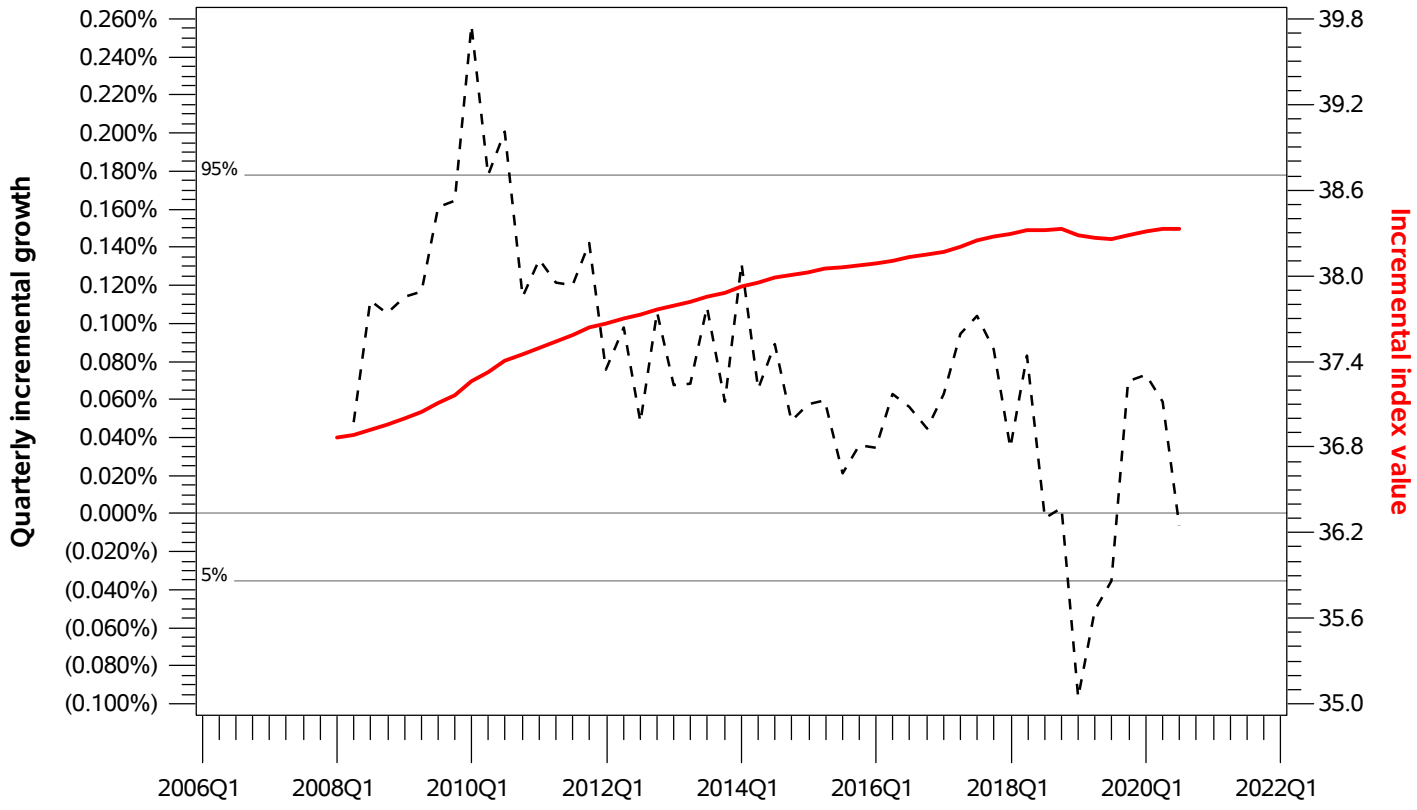


Table 99. CPI-U: Health insurance incremental growth over CPI-U: Medical Care

LABSTAT series identifiers: CUUR0000SEME and CUSR0000SAM
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-5.2165	Z_{Tau}	-1.5829
Prob Z_{Rho}	0.3971	Prob Z_{Tau}	0.4840

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.2315	AR(1) coefficient	-0.9184
Standard error	0.8910	Standard error	0.0571
t-statistic	0.2598	t-statistic	-16.0850
Probability t	0.7961	Durbin-Watson	0.7351

Estimated incremental annual growth rate: 0.929%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

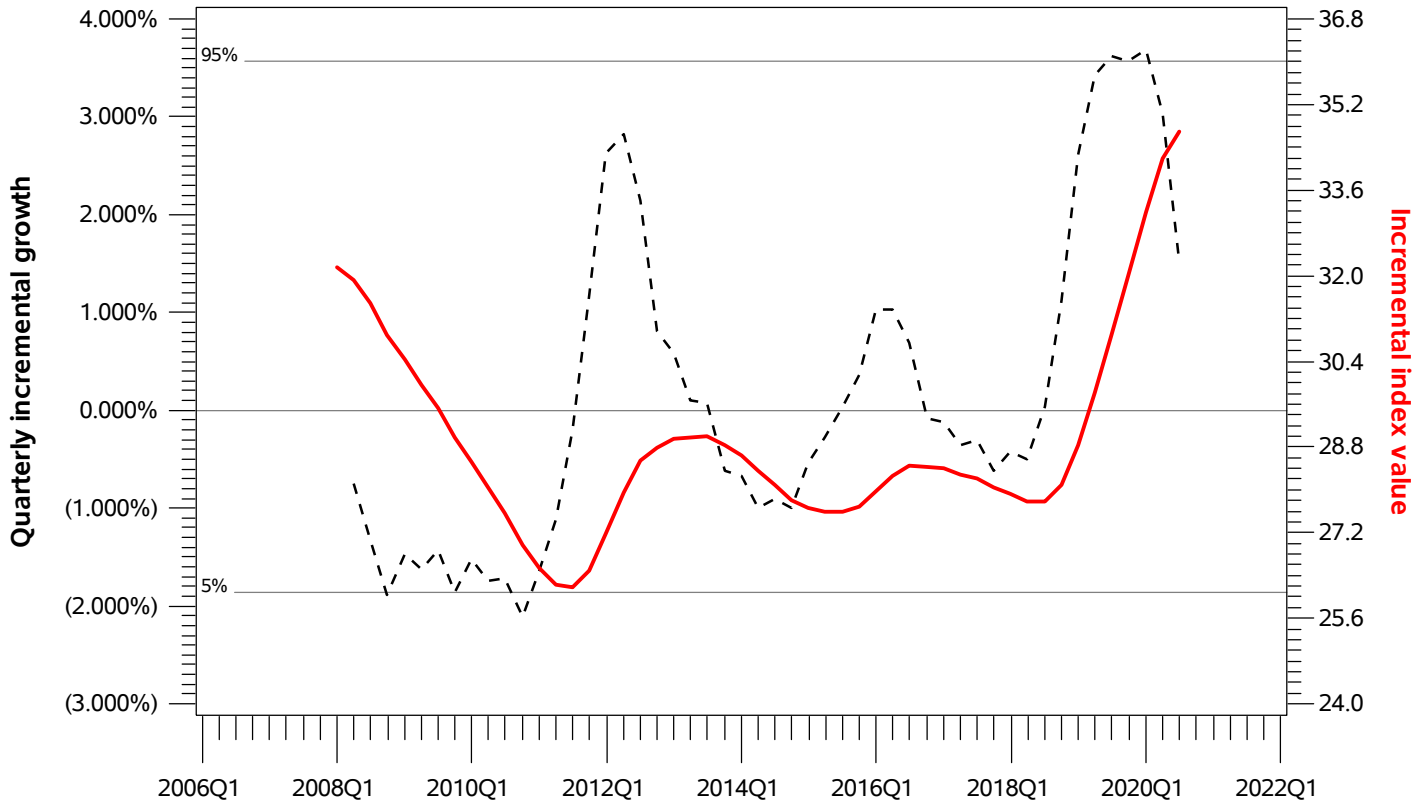


Table 100. CPI-U: Nonprescription drugs incremental growth over CPI-U: Medical care commodities

LABSTAT series identifiers: CUUR0000SEMF02 and CUSR0000SAM1

Historical data period: DEC-2009 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-14.9664	Z_{Tau}	-2.8458
Prob Z_{Rho}	0.0265	Prob Z_{Tau}	0.0603

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.5772	AR(1) coefficient	-0.6087
Standard error	0.1571	Standard error	0.1254
t-statistic	-3.6738	t-statistic	-4.8525
Probability t	0.0007	Durbin-Watson	1.8297

Estimated incremental annual growth rate: (2.289%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (2.289%)

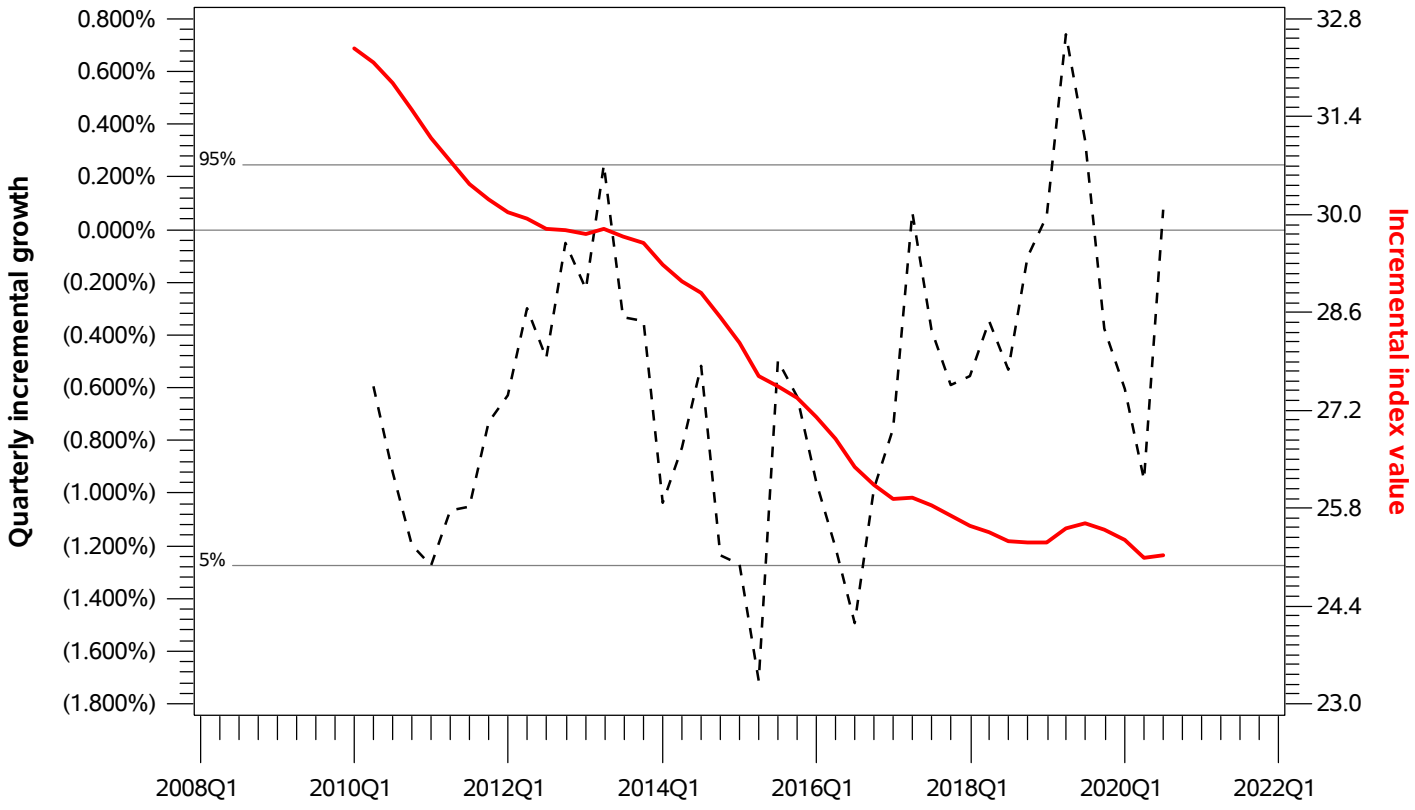


Table 101. CPI-U: Medical equipment and supplies incremental growth over CPI-U: Medical care commodities

LABSTAT series identifiers: CUUR0000SEMG and CUSR0000SAM1
Historical data period: DEC-2009 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-16.3711	Z_{Tau}	-3.2721
Prob Z_{Rho}	0.0172	Prob Z_{Tau}	0.0224

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.4784	AR(1) coefficient	-0.5608
Standard error	0.1778	Standard error	0.1309
t-statistic	-2.6907	t-statistic	-4.2837
Probability t	0.0104	Durbin-Watson	2.0519

Estimated incremental annual growth rate: (1.900%)

H_0: $\mu = 0$, Reject null hypothesis

Forecasted incremental annual growth rate: (1.900%)

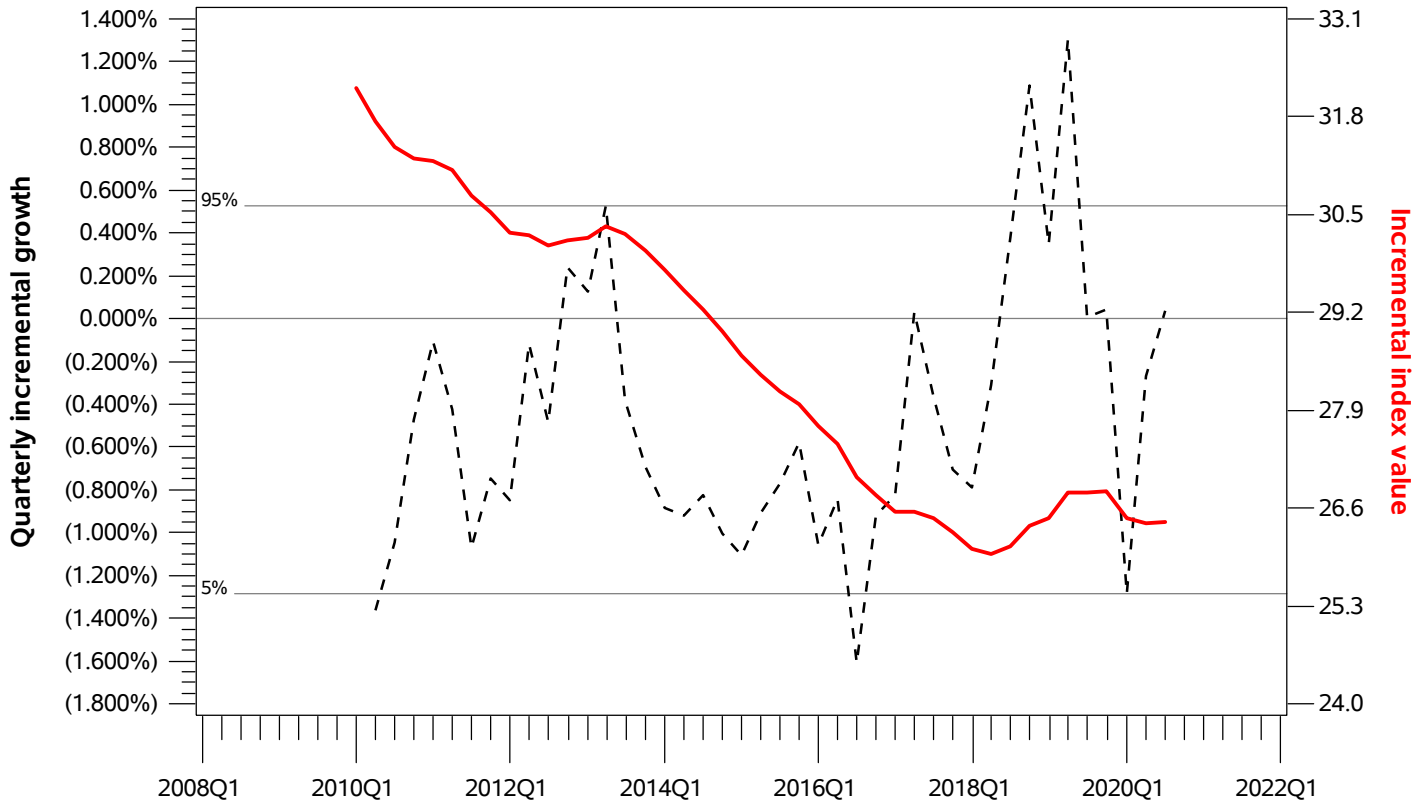


Table 102. CPI-U: Recreation services incremental growth over CPI-U: Services

LABSTAT series identifiers: CUSR0000SARS and CUSR0000SAS
Historical data period: MAR-2010 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.1277	Z_{Tau}	-3.5384
Prob Z_{Rho}	0.0036	Prob Z_{Tau}	0.0114

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.0069	AR(1) coefficient	-0.5353
Standard error	0.0628	Standard error	0.1353
t-statistic	-0.1093	t-statistic	-3.9573
Probability t	0.9135	Durbin-Watson	1.5972

Estimated incremental annual growth rate: (0.027%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

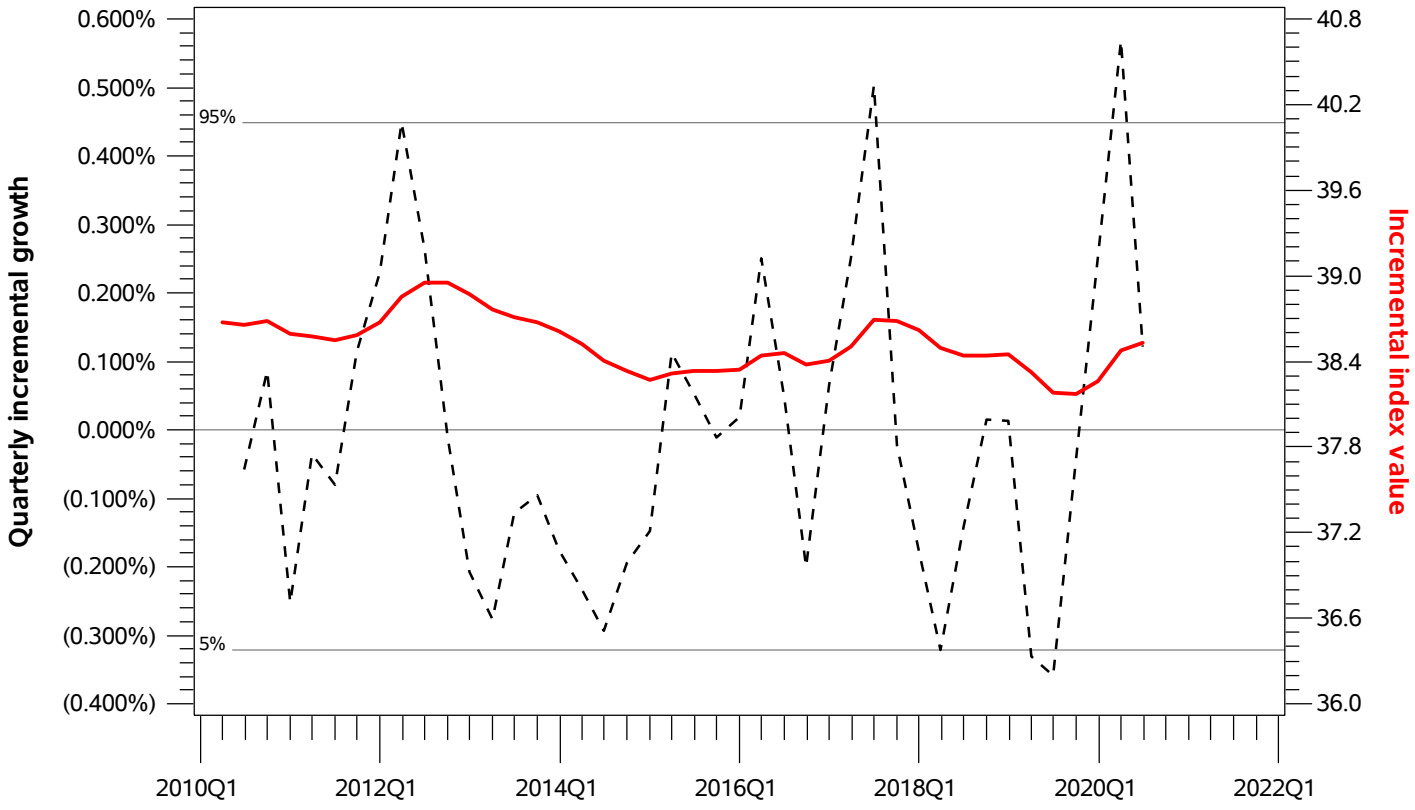


Table 103. CPI-U: Financial services incremental growth over CPI-U: Services

LABSTAT series identifiers: CUSR0000SEGD05 and CUSR0000SAS
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-21.4955	Z_{Tau}	-3.5308
Prob Z_{Rho}	0.0038	Prob Z_{Tau}	0.0108

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0598	AR(1) coefficient	-0.6146
Standard error	0.2571	Standard error	0.1139
t-statistic	0.2325	t-statistic	-5.3980
Probability t	0.8171	Durbin-Watson	1.6554

Estimated incremental annual growth rate: 0.239%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

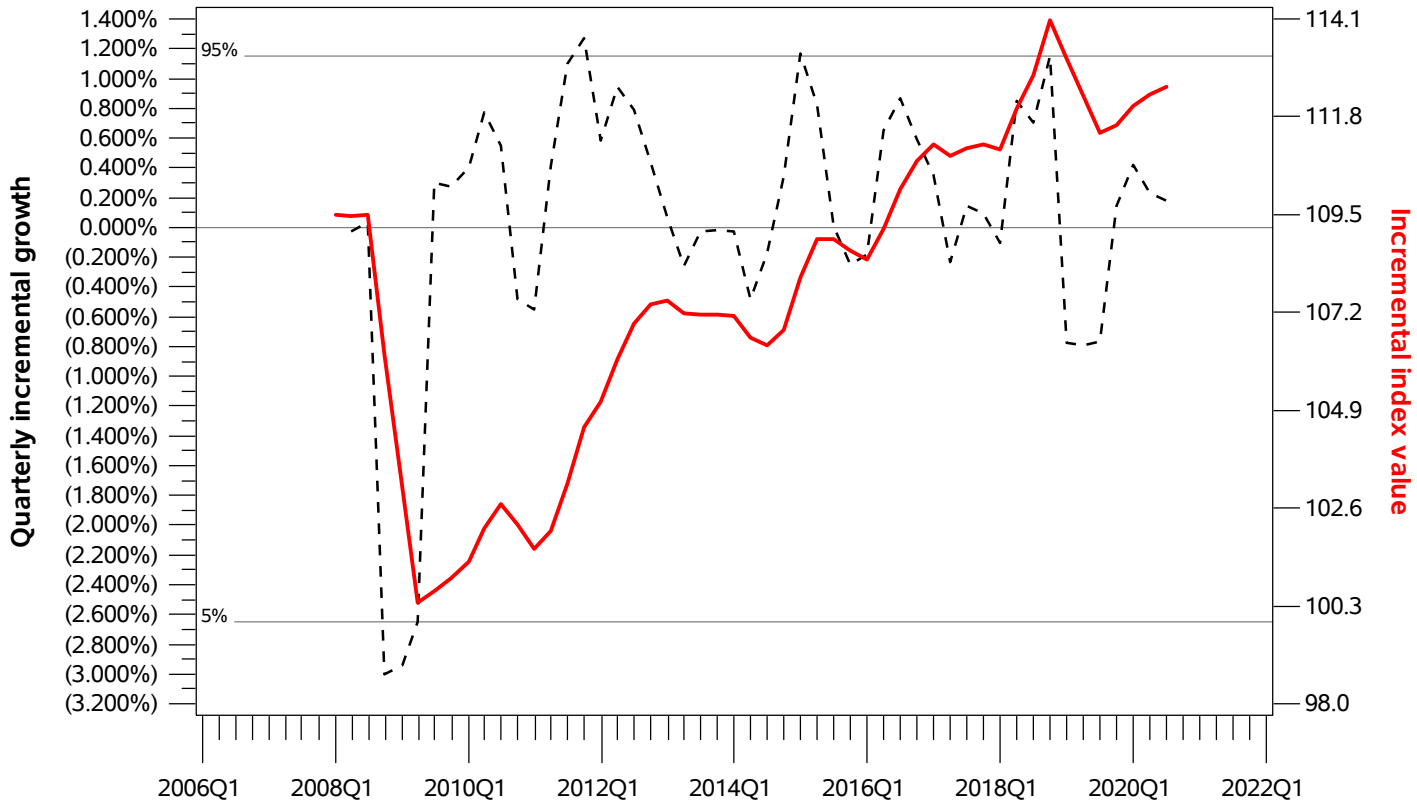


Table 104. CPI-U: Gardening and lawncare services incremental growth over CPI-U: Services

LABSTAT series identifiers: CUUR0000SEHP02 and CUSR0000SAS
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-15.3250	Z_{Tau}	-3.0451
Prob Z_{Rho}	0.0243	Prob Z_{Tau}	0.0382

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.2831	AR(1) coefficient	-0.6168
Standard error	0.2564	Standard error	0.1215
t-statistic	1.1045	t-statistic	-5.0785
Probability t	0.2757	Durbin-Watson	1.7274

Estimated incremental annual growth rate: 1.137%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

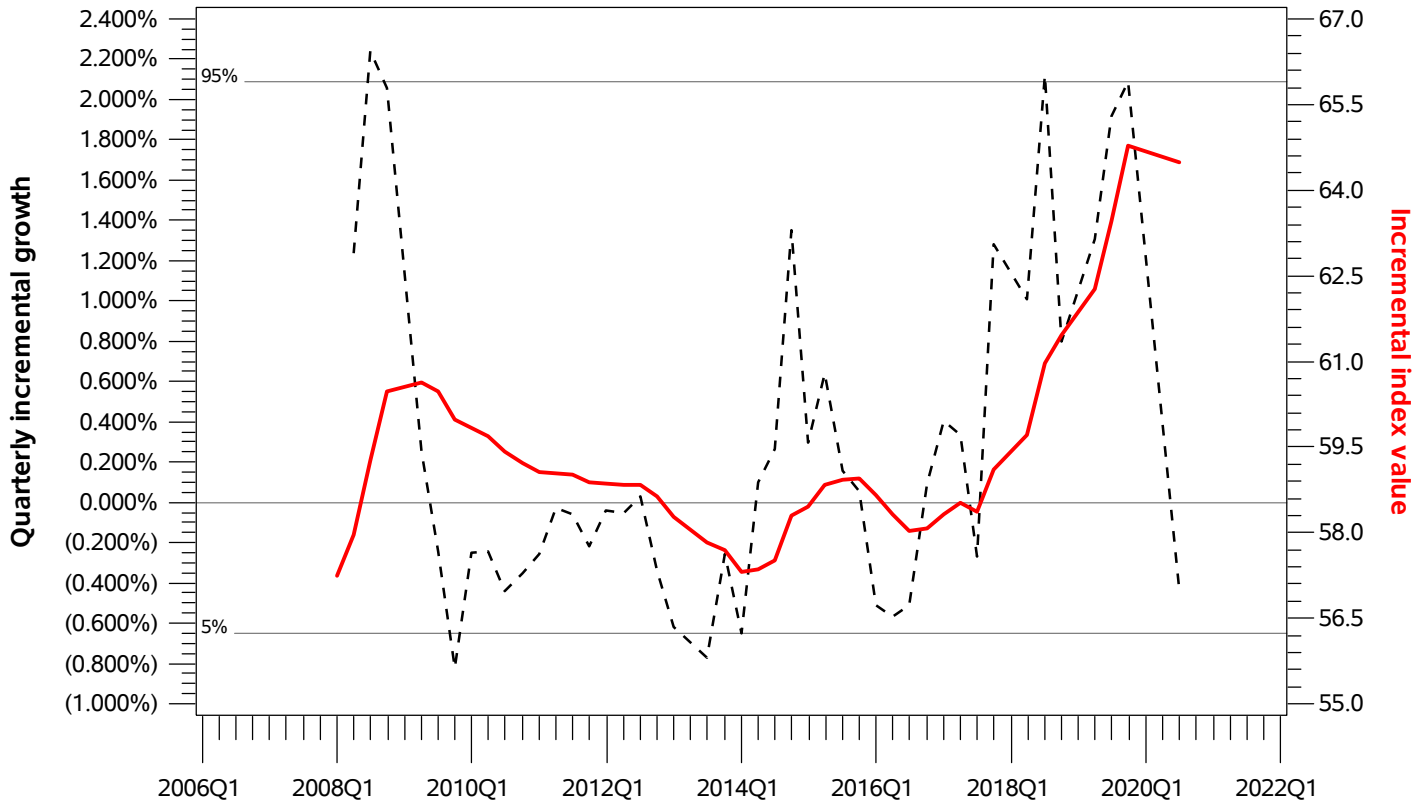


Table 105. CPI-U: Motor vehicle maintenance and repair incremental growth over CPI-U: Services

LABSTAT series identifiers: CUSR0000SETD and CUSR0000SAS

Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-6.3008	Z_{Tau}	-1.7112
Prob Z_{Rho}	0.3046	Prob Z_{Tau}	0.4198

H_0: Series contains a unit root, Fail to reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	0.0830	AR(1) coefficient	-0.8263
Standard error	0.1276	Standard error	0.0813
t-statistic	0.6503	t-statistic	-10.1654
Probability t	0.5186	Durbin-Watson	2.0443

Estimated incremental annual growth rate: 0.332%

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

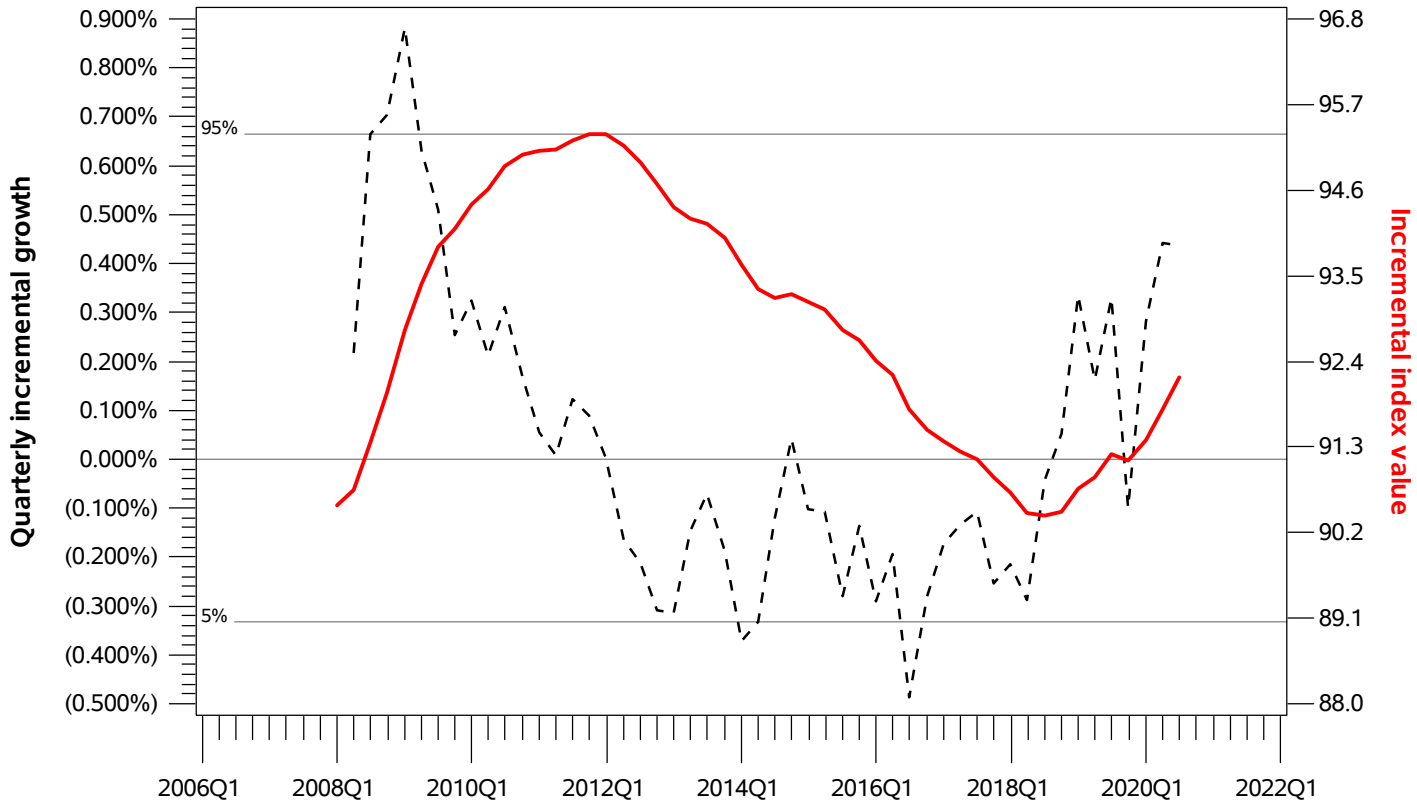


Table 106. CPI-U: Public transportation incremental growth over CPI-U: Transportation

LABSTAT series identifiers: CUSR0000SETG and CUSR0000SAT
Historical data period: DEC-2007 to JUN-2020 (Quarterly)

Phillips-Perron single mean stationarity test statistic

$$G_t = \mu + \rho G_{t-1} + u_t$$

Z_{Rho}	-22.4237	Z_{Tau}	-3.4709
Prob Z_{Rho}	0.0028	Prob Z_{Tau}	0.0127

H_0: Series contains a unit root, Reject null hypothesis

Yule-Walker Parameter Estimates AR(1)

$$u_t = \varepsilon_t - \psi_1 u_{t-1}$$

	Mean Quarterly Growth Rate %		AR(1) Parameter
Intercept	-0.2235	AR(1) coefficient	-0.5816
Standard error	0.4102	Standard error	0.1174
t-statistic	-0.5449	t-statistic	-4.9530
Probability t	0.5883	Durbin-Watson	1.5088

Estimated incremental annual growth rate: (0.891%)

H_0: $\mu = 0$, Fail to reject null hypothesis

Forecasted incremental annual growth rate: 0.000%

