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090079-EI

Source: Economy .com

Mnemonic:	FXPPIME1.US	FPCNBCPH.US	FPPISP2000.US	FDPDGP.US
Description:	PPI: Metals and Metal Products - Iron	Productivity and Costs: Nonfarm Bus	PPI: Intermediate Materials, (Index, 1	NIPA: Chain-Type Price Index - GDP, (Index, 2000=100, SA)
Source:	Bureau of Labor Statistics: Producer	Bureau of Labor Statistics: Productivi	Bureau of Labor Statistics: Producer	Bureau of Economic Analysis; Moody's Economy.com
Native Frequency:	QUARTERLY	QUARTERLY	QUARTERLY	QUARTERLY
Observed:	AVERAGED	AVERAGED	AVERAGED	AVERAGED
Geography:	United States	United States	United States	United States
Begin Date:	12/31/1926	12/31/1947	12/31/1948	12/31/1947
Last Updated:	07/13/2009	07/13/2009	07/13/2009	07/13/2009
Historical End Date:	03/31/09	03/31/09	03/31/09	03/31/09
Dec-26		11.29 na	na	na
Dec-27		10.63 na	na	na
Dec-28		10.57 na	na	na
Dec-29		10.72 na	na	na
Dec-30		10.07 na	na	na
Dec-31		9.40 na	na	na
Dec-32		8.97 na	na	na
Dec-33		8.88 na	na	na
Dec-34		9.79 na	na	na
Dec-35		9.78 na	na	na
Dec-36		9.91 na	na	na
Dec-37		11.08 na	na	na
Dec-38		11.13 na	na	na
Dec-39		10.83 na	na	na
Dec-40		10.74 na	na	na
Dec-41		10.91 na	na	na
Dec-42		11.00 na	na	na
Dec-43		11.00 na	na	na
Dec-44		11.00 na	na	na
Dec-45		11.19 na	na	na
Dec-46		12.42 na	na	na
Dec-47		15.12	7.46 na	15.49
Dec-48		17.57	8.11	16.37
Dec-49		17.85	8.34	16.36
Dec-50		19.06	8.83	16.49
Dec-51		20.73	9.61	17.63
Dec-52		21.00	10.13	18.01
Dec-53		22.12	10.70	18.24
Dec-54		22.38	11.04	18.43
Dec-55		23.68	11.44	18.71
Dec-56		26.06	12.14	19.36
Dec-57		28.02	12.85	20.04
Dec-58		28.46	13.35	20.51
Dec-59		28.98	13.88	20.75
Dec-60		28.64	14.48	21.04
Dec-61		28.65	14.95	21.28
Dec-62		28.27	15.55	21.57
Dec-63		28.23	16.08	21.80
Dec-64		28.63	16.59	22.13
Dec-65		28.86	17.14	22.54
Dec-66		29.15	18.15	23.18

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13

DOCUMENT NO. DATE

DECLASSIFIED 08992-09 08/31/2009
02/02/2010
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Dec-67	29.50	19.21	32.23	23.90
Dec-68	30.08	20.72	32.96	24.92
Dec-69	31.59	22.13	34.08	26.15
Dec-70	33.93	23.72	35.39	27.54
Dec-71	35.93	25.22	36.74	28.92
Dec-72	37.88	26.86	38.25	30.17
Dec-73	40.18	29.05	42.38	31.85
Dec-74	52.67	31.90	52.48	34.72
Dec-75	59.26	35.09	58.00	38.01
Dec-76	63.69	38.05	60.95	40.20
Dec-77	67.94	41.14	64.94	42.76
Dec-78	74.79	44.79	69.46	45.76
Dec-79	83.63	49.09	78.37	49.55
Dec-80	90.02	54.40	90.31	54.06
Dec-81	98.47	59.71	98.59	59.13
Dec-82	100.00	63.95	99.98	62.74
Dec-83	101.30	66.62	100.62	65.21
Dec-84	105.28	69.45	103.10	67.86
Dec-85	104.80	72.62	102.65	69.72
Dec-86	101.16	76.39	99.11	71.27
Dec-87	104.57	79.21	101.54	73.20
Dec-88	115.68	83.11	107.06	75.71
Dec-89	119.08	85.25	112.01	78.57
Dec-90	117.22	90.44	114.43	81.61
Dec-91	114.08	95.01	114.43	84.46
Dec-92	111.47	100.00	114.66	86.40
Dec-93	115.99	101.99	116.22	88.39
Dec-94	121.97	103.69	118.52	90.27
Dec-95	128.81	105.86	124.93	92.11
Dec-96	125.82	109.42	125.74	93.86
Dec-97	126.46	112.80	125.66	95.41
Dec-98	122.51	119.55	123.02	96.48
Dec-99	114.04	125.19	123.17	97.87
Dec-00	118.60	134.04	129.17	100.00
Dec-01	109.68	139.52	129.69	102.40
Dec-02	114.06	144.59	127.79	104.19
Dec-03	121.49	150.42	133.71	106.41
Dec-04	162.41	155.95	142.59	109.46
Dec-05	171.14	162.12	154.04	113.04
Dec-06	186.53	168.29	163.92	116.68
Dec-07	201.06	175.25	170.43	119.82
Dec-08	246.42	181.73	188.08	122.50
Dec-09	187.81	188.34	170.98	123.99
Dec-10	194.14	192.06	174.73	124.33
Dec-11	200.82	196.43	179.25	125.94
Dec-12	207.78	199.64	182.84	127.97
Dec-13	214.01	202.07	185.52	130.13
Dec-14	220.73	205.09	188.36	132.23
Dec-15	227.93	209.62	191.85	134.44
Dec-16	235.36	215.90	195.81	136.81

Dec-17	243.07	223.26	199.87	139.21
Dec-18	250.99	231.21	203.92	141.64
Dec-19	259.09	239.46	208.04	144.10
Dec-20	267.40	248.00	212.22	148.58
Dec-21	275.94	256.81	216.52	149.11
Dec-22	284.75	265.93	220.99	151.65
Dec-23	293.88	275.37	225.55	154.20
Dec-24	303.20	285.18	230.16	156.77
Dec-25	312.78	295.36	234.67	159.31
Dec-26	322.60	305.68	239.21	161.85
Dec-27	332.79	316.14	243.84	164.40
Dec-28	343.25	326.71	248.55	166.95
Dec-29	353.99	337.50	253.33	169.48
Dec-30	365.08	348.16	258.19	172.01
Dec-31	376.60	358.99	263.11	174.53
Dec-32	388.43	370.04	268.08	177.06
Dec-33	400.55	380.93	273.09	179.59
Dec-34	413.00	391.66	278.16	182.15
Dec-35	425.44	402.29	283.25	184.82
Dec-36	438.55	412.99	288.35	187.33
Dec-37	452.39	423.95	293.45	189.83
Dec-38	466.48	435.21	298.56	192.02
Dec-39	480.95	446.71	303.64	194.42

DECLASSIFIED**Carter, Kate****Subject:** RE: PEF Initial Inflation Forecast File...

From: Lynch, Edward V
Sent: Friday, July 17, 2009 11:12 AM
To: Carter, Kate
Subject: FW: PEF Initial Inflation Forecast File...

See attached.

From: Heid, Robin [mailto:RHeid@economy.com]
Sent: Friday, July 17, 2009 11:10 AM
To: Lynch, Edward V
Subject: RE: PEF Initial Inflation Forecast File...

Hi Ed:

Attached is the annual data. I converted from quarterly using a cubic spline method which is our standard.

Information

The two most commonly used techniques for conversion are Linear and Cubic:

Note that on the Buffet we use cubic spline interpolation to convert from a lower frequency to a higher frequency, unless there are 3 or less data points, when we use linear.

For the Linear and Cubic techniques, the continuous time representation is a linear or cubic spline. The graph of a linear spline consists of straight line segments (equation $(y = ax + b)$) that join each other at the end points. These joining points are called the knots of the spline.

A cubic spline is similar to a linear spline except that instead of being pieced together from straight lines, it is pieced together from cubic curves (equation $y = ax^3 + bx^2 + cx + d$). Like the linear spline the cubic spline must have the same value at the knots. In addition, the pieces are required to have the same value, slope and curvature at the knots (i.e., in terms of the calculus, the value of the function and its first two derivatives must match.) In practice, this means that when you look at a plot of a cubic spline, the curve is so smooth that you cannot tell where the knots are.

The coefficients are determined by the values of the annual series you want to convert, plus the observed attribute of that series (is it averaged, summed, beginning or end of period data.) Requiring that the splines give the correct value for the current series, and are seamless (agree in value, first derivative, and second derivative) at the connecting points ("knots"), gives you an equal number of equations and unknowns. Solving this system of equations gives you the coefficients.

*Robin***DECLASSIFIED**

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