



## Economic alphabet soup

*prepared for the  
House and Senate money committees  
Hawaii State Capitol Auditorium  
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on Revenues*

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US Dept of State Geographer

41°14'36.84" N 132°20'34.32" W elev -12928 ft

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Eye alt 4352.41 mi



# Economic recovery alphabet soup

**L**

Is where you go down and stay down, or recover only slowly

**V**

Is where you go down and come back up, with any luck as fast

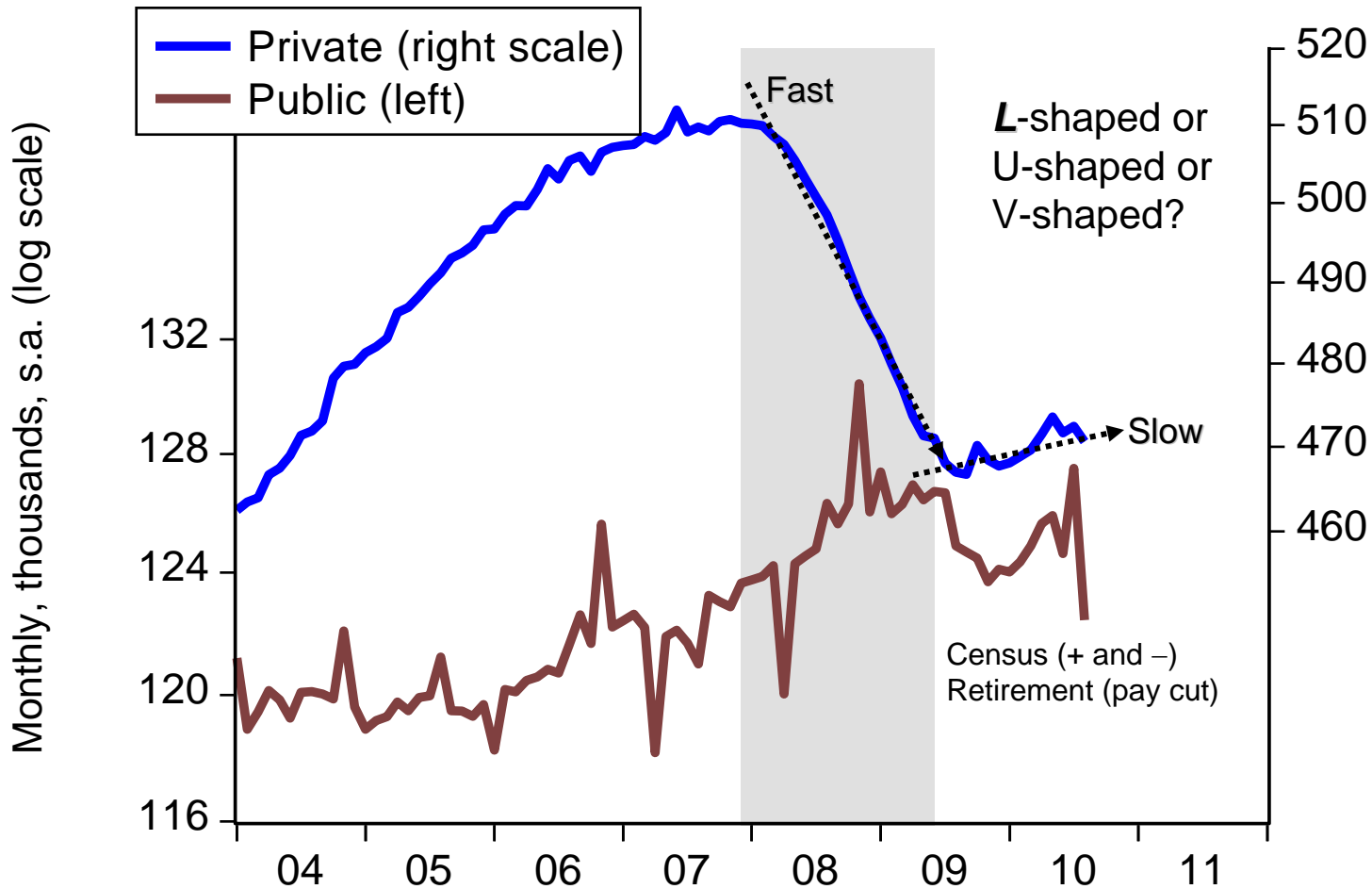
**U**

Is where you go down and stay down, and then come back up

**J**

Is where you go down but as you come back recovery peters out

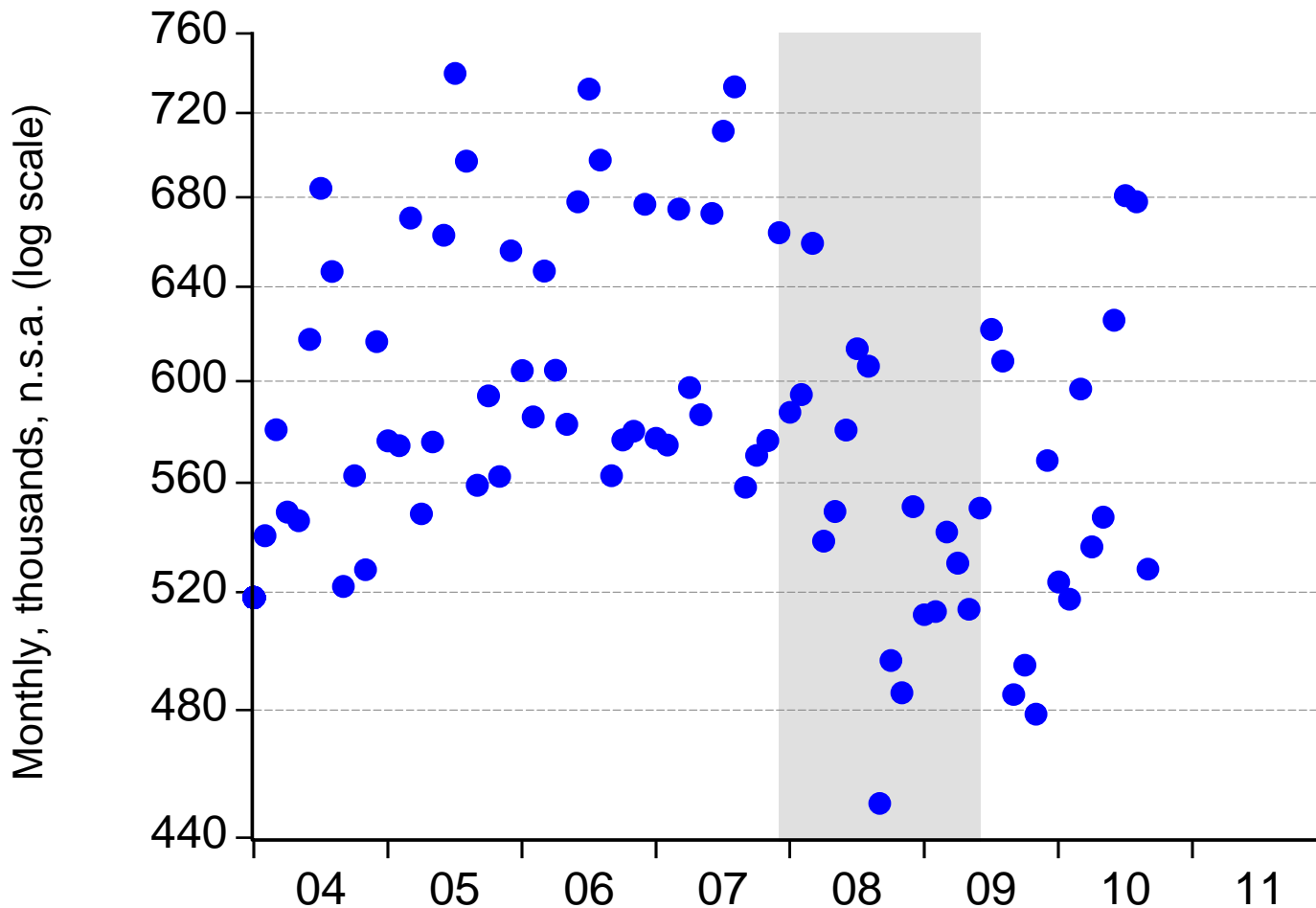
# Payroll employment: closest thing to L-shaped (L is for “lagging indicator”)



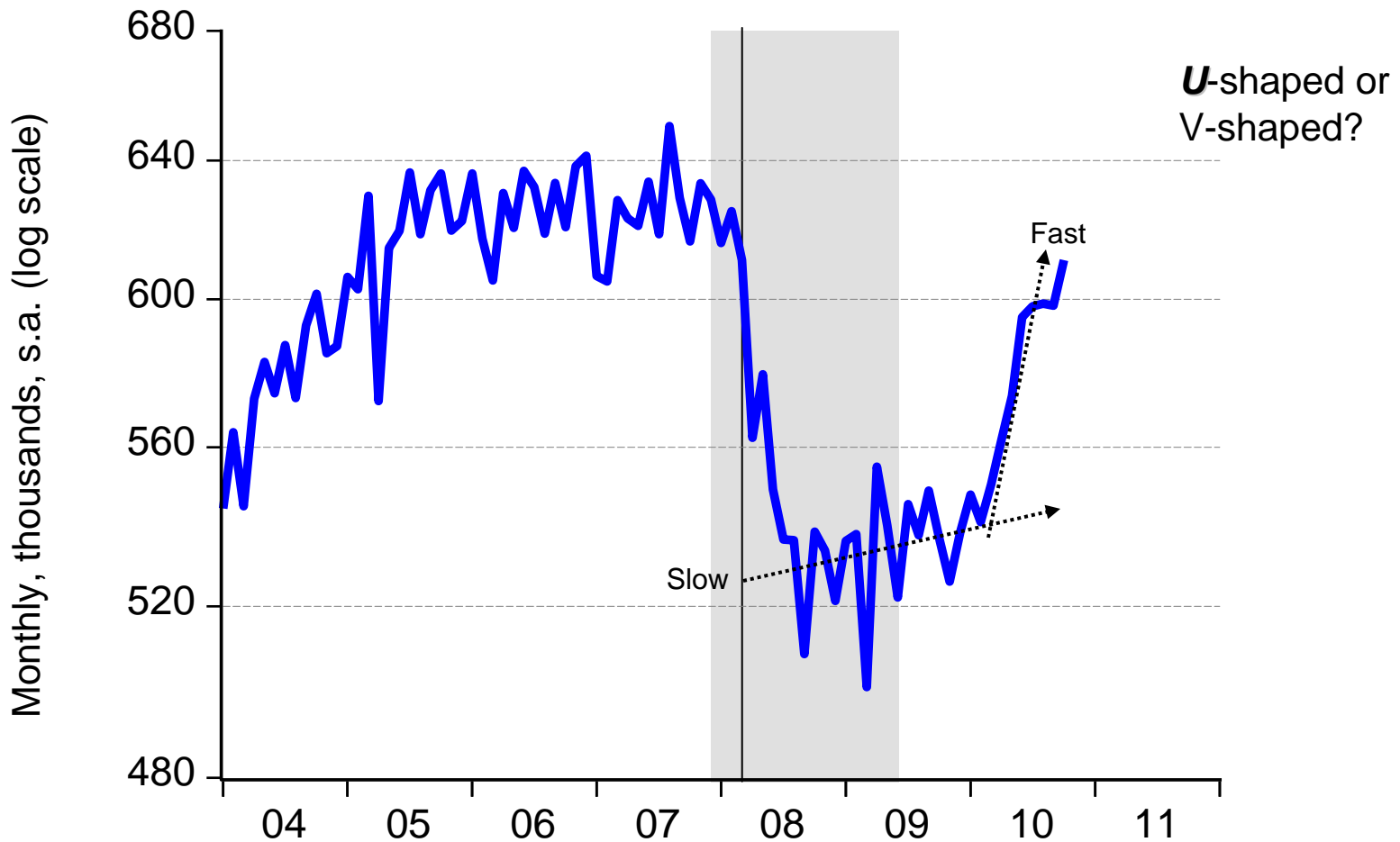
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Source: Hawaii DLIR, Hawaii DBEDT; seasonal adjustment using Census X-12 ARIMA filter by TZE

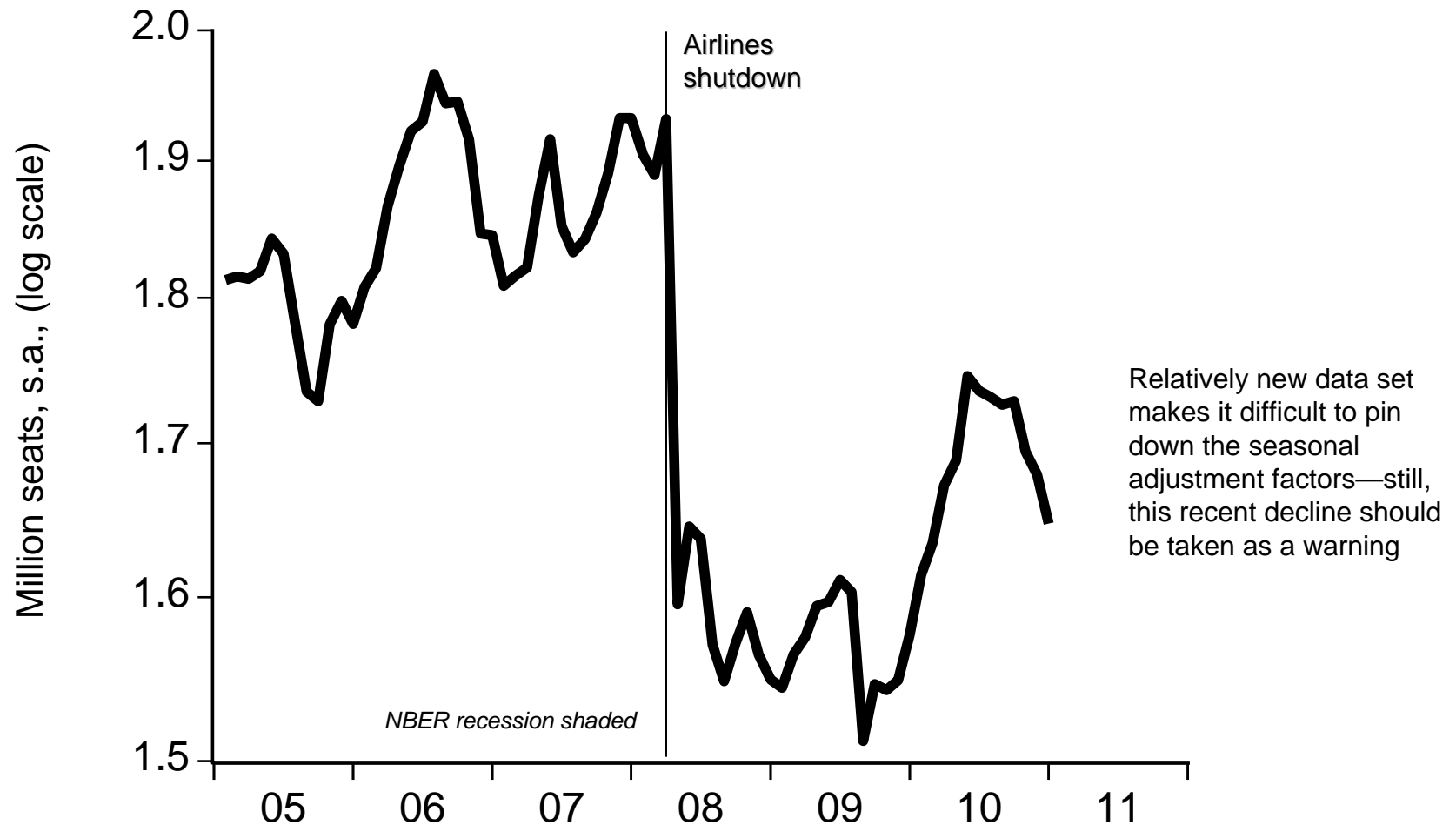
# Without seasonal adjustment: noise drowns signal (total Hawaii visitor arrivals through September 2010)



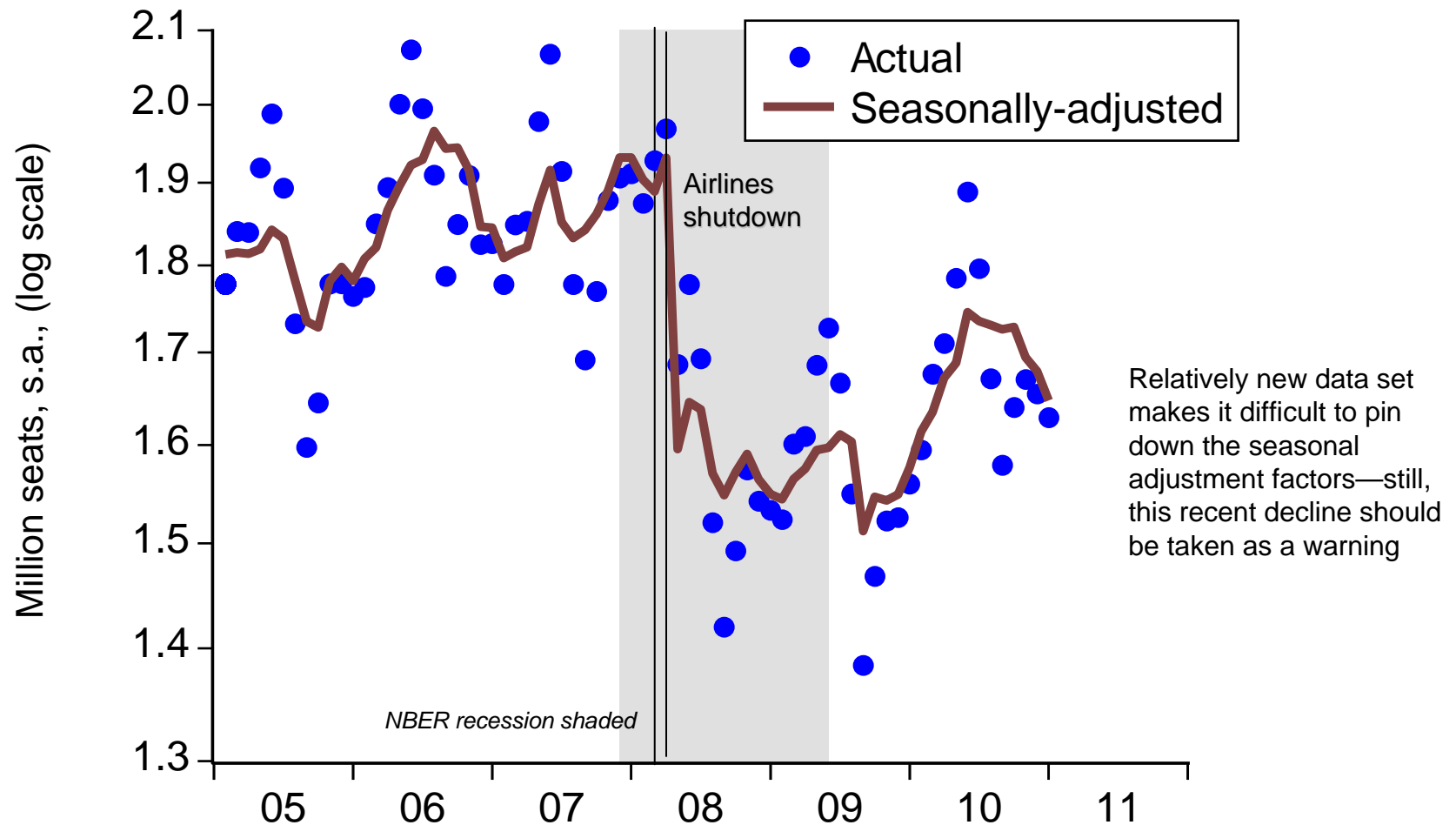
# Seasonally-adjusted total visitor arrivals: U-shaped (through October 2010)



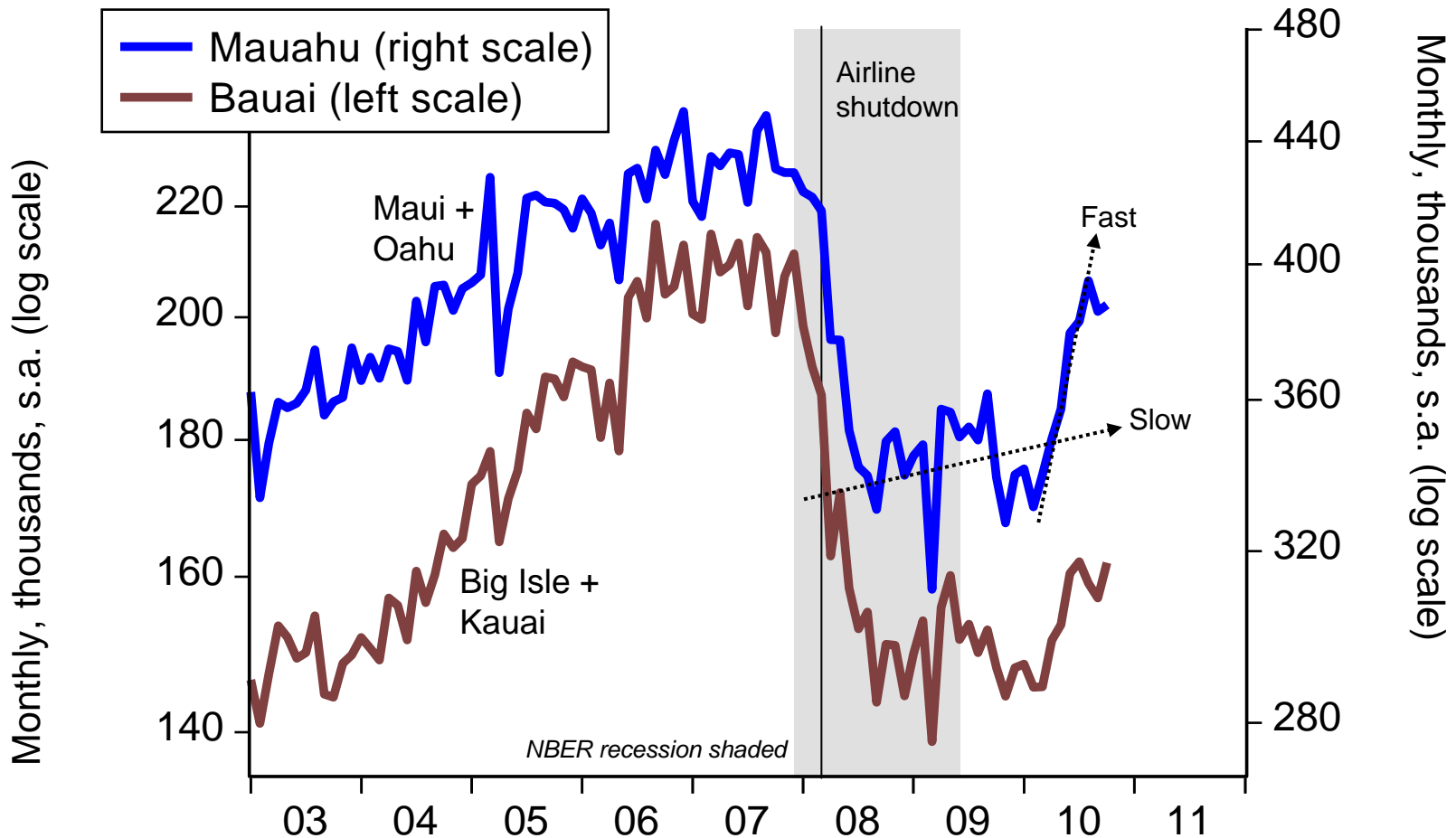
# Monthly estimates of quarter-ahead domestic lift through the January – March 2011 quarter



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# Domestic arrivals a mix of U-shaped (Oahu, Maui) and L-shaped (Hawaii Isle, Kauai) recoveries

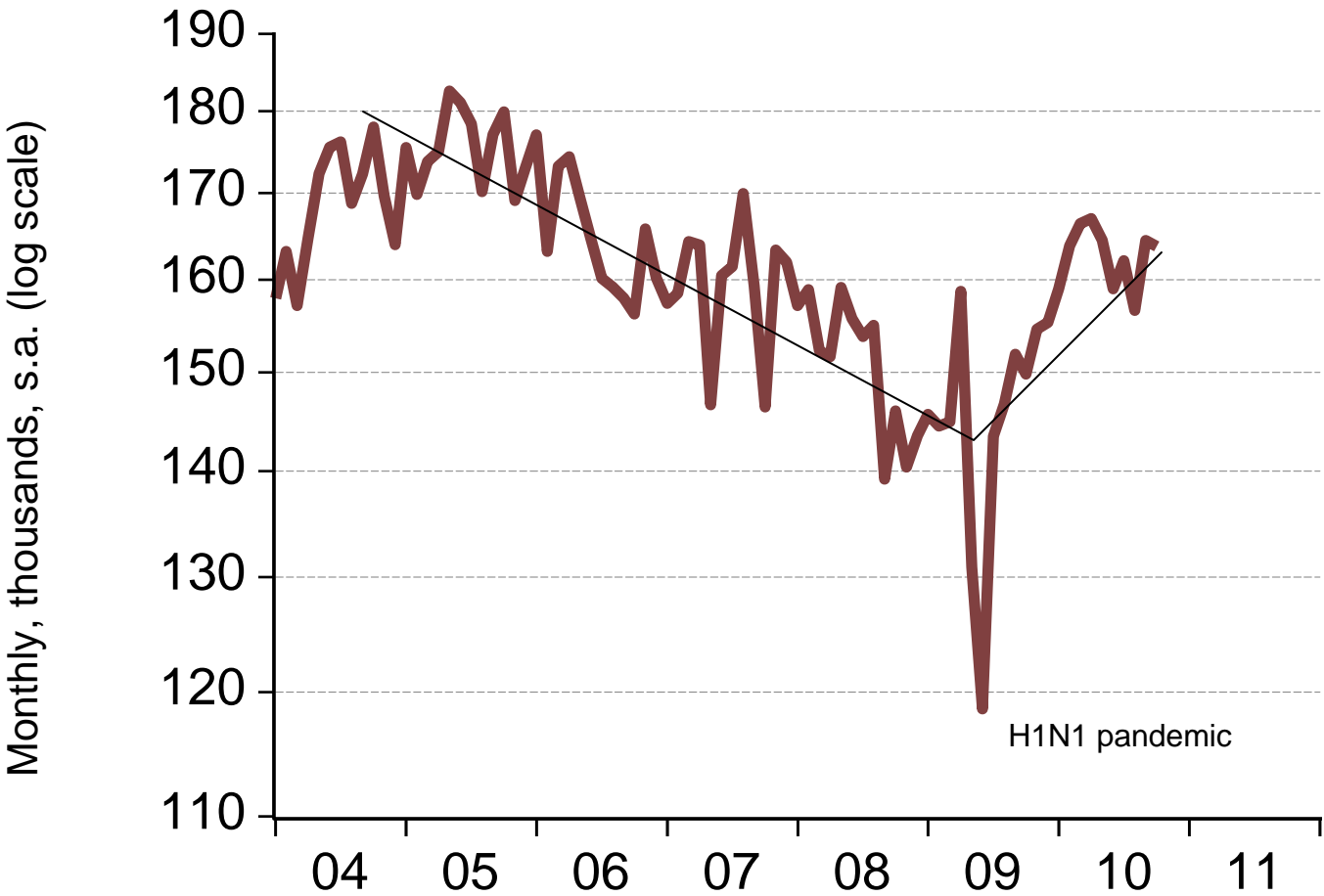


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Source: HTA, Hawaii DBEDT; seasonal adjustment using Census X-12 ARIMA filter by TZE



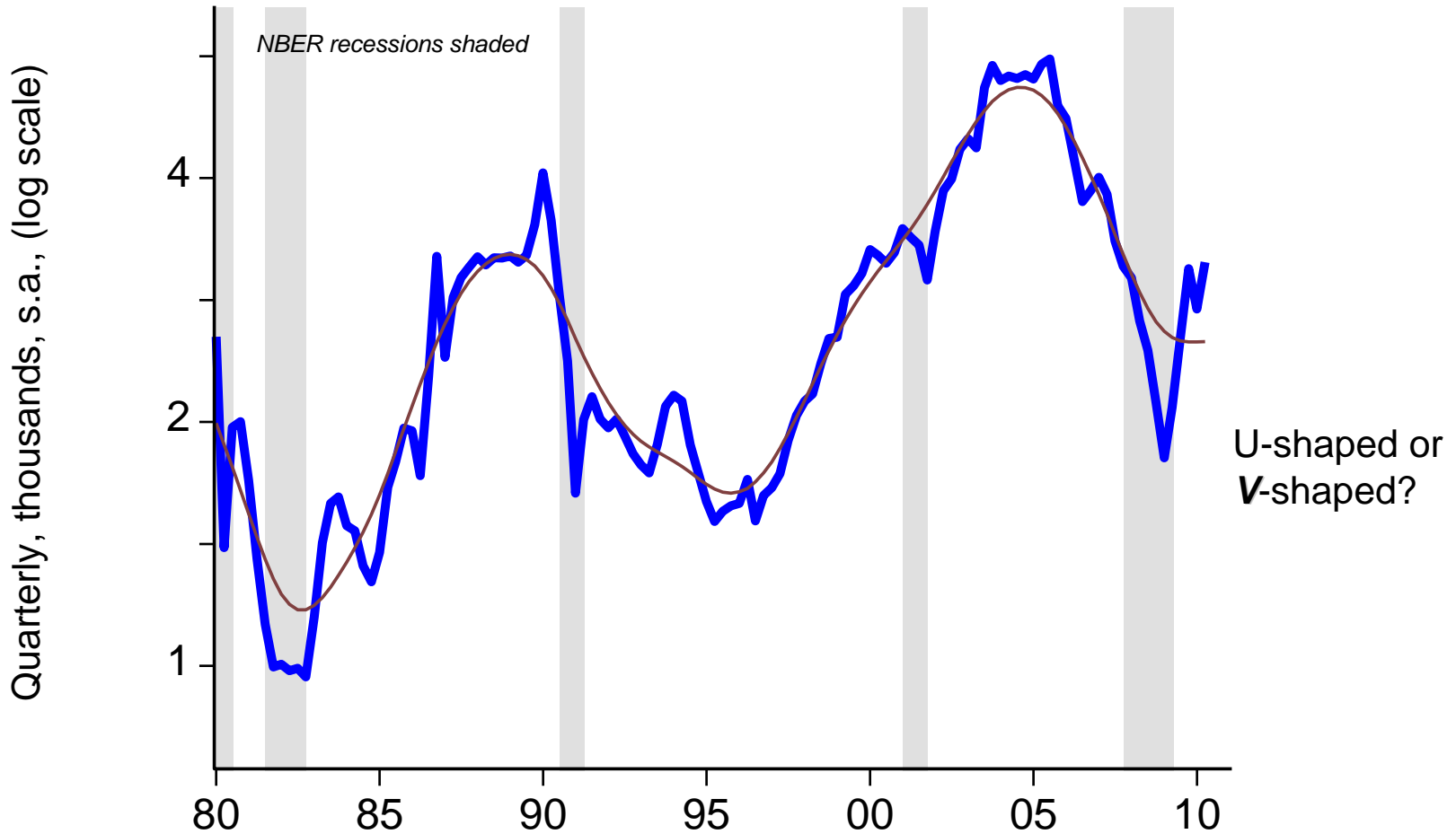
# International visitor arrivals: trying



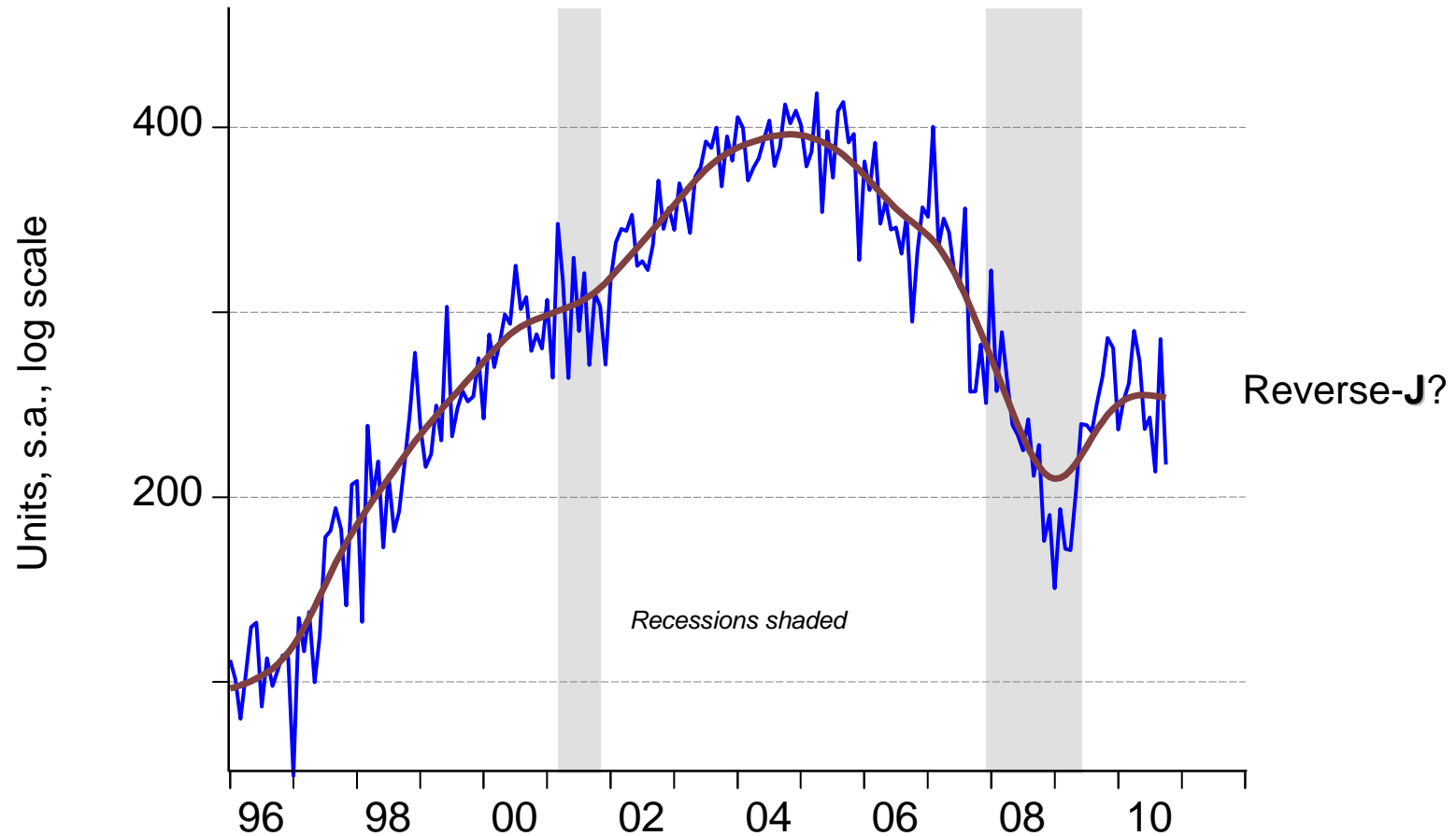
L-shaped or V-shaped?  
That's some long V-shaped descent, eh?

H1N1 pandemic

# Total statewide existing single-family home and condominium sales: yowzah! like the 80s? the 90s?



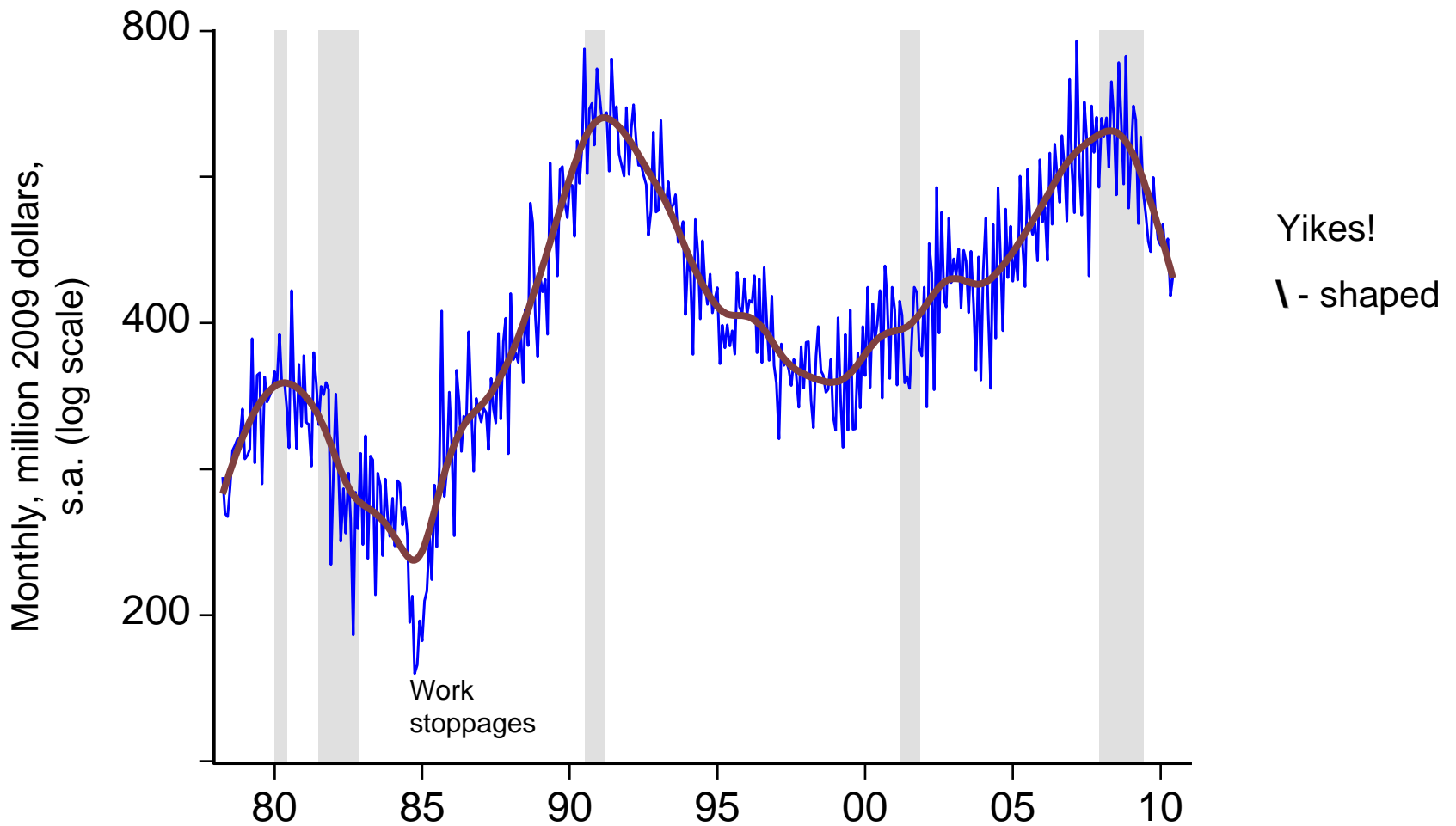
# Oahu single-family home sales: a “reverse-J”



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Source: Honolulu Board of Realtors; seasonal-adjustment and trend extraction by TZE

# No turn yet: Hawaii construction through mid-year

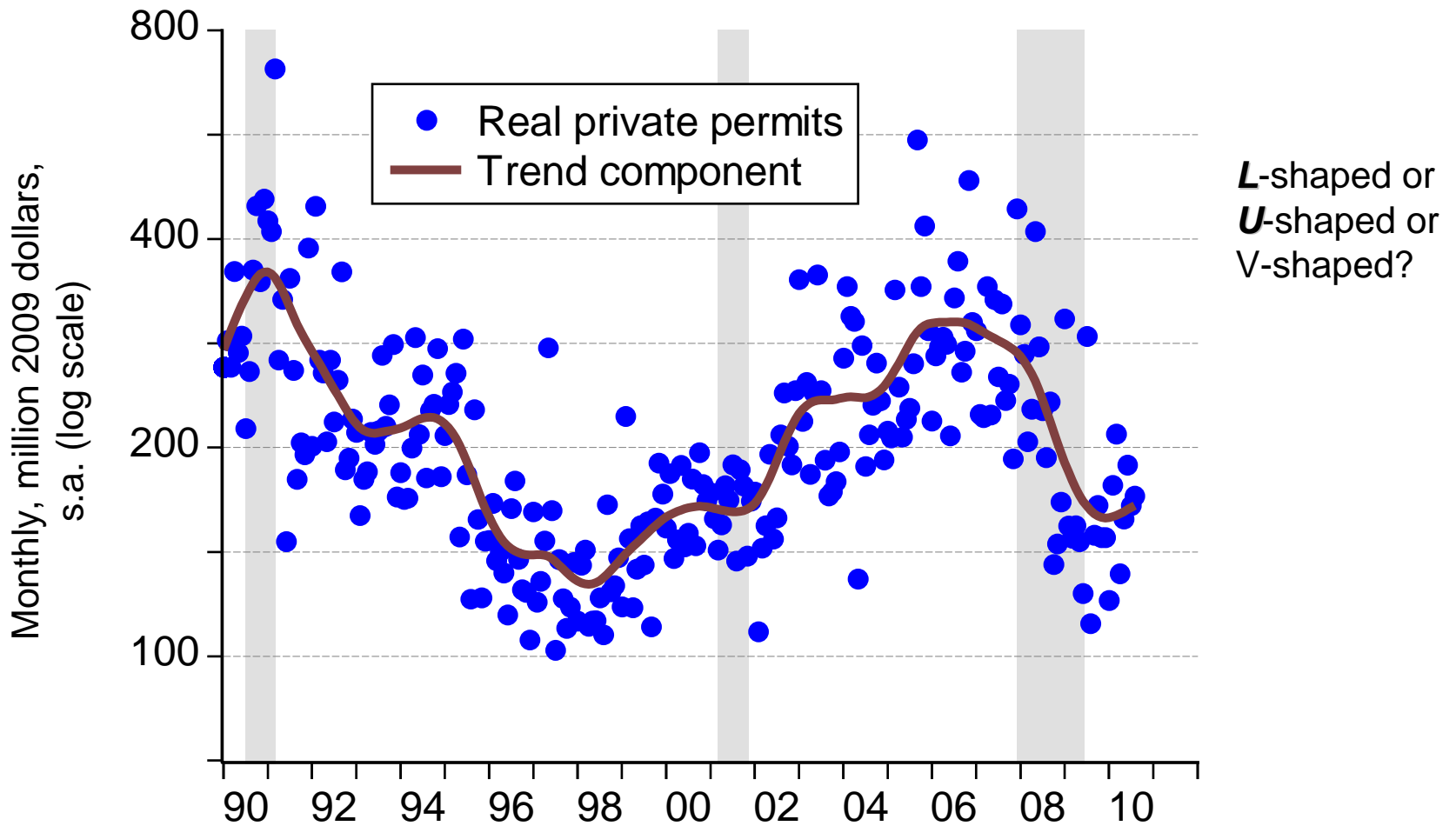


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Source: Hawaii DBEDT, U.S. Bureau of the Census; seasonal adjustment using Census X-12 ARIMA, cycle/trend using Hodrick-Prescott filter, both by TZE

# Real private building permits (through August 2010)

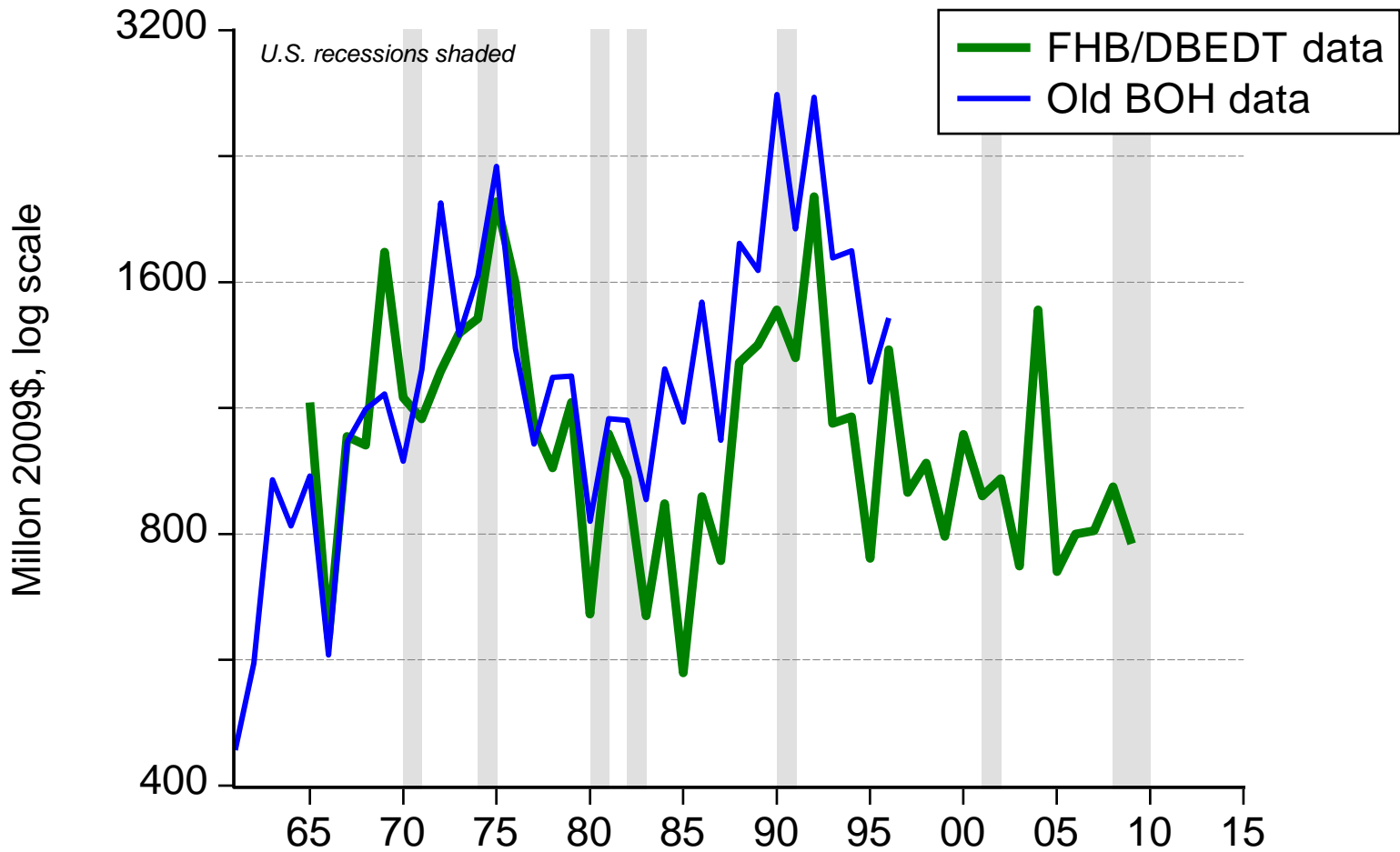
## U-shaped: that's the bottom



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Source: Hawaii DBEDT, U.S. Bureau of the Census; seasonal adjustment using Census X-12 ARIMA, cycle/trend using Hodrick-Prescott filter, both by TZE

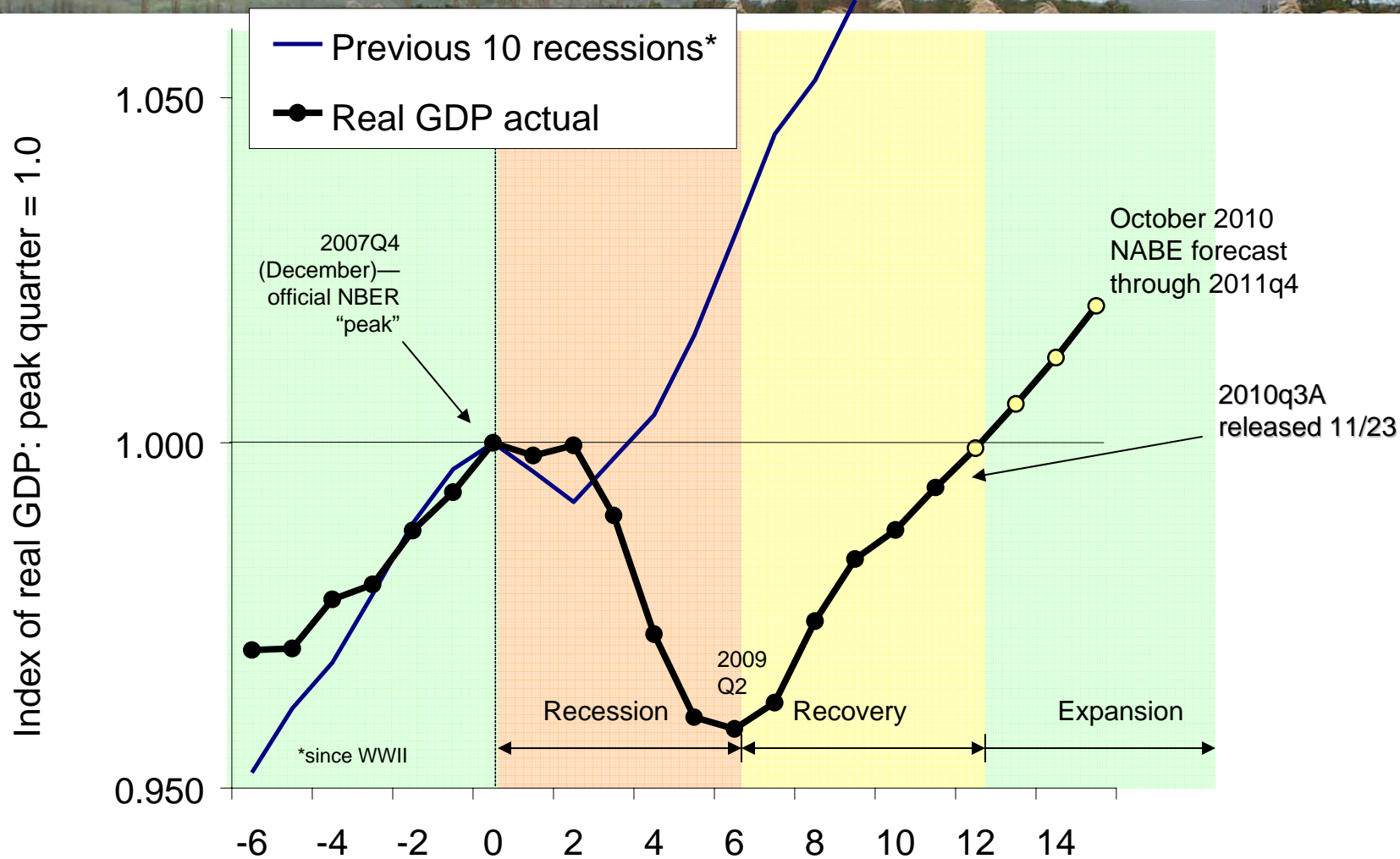
# Real Hawaii total government construction contracts



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Source: Hawaii DBEDT, U.S. Bureau of the Census, TZE

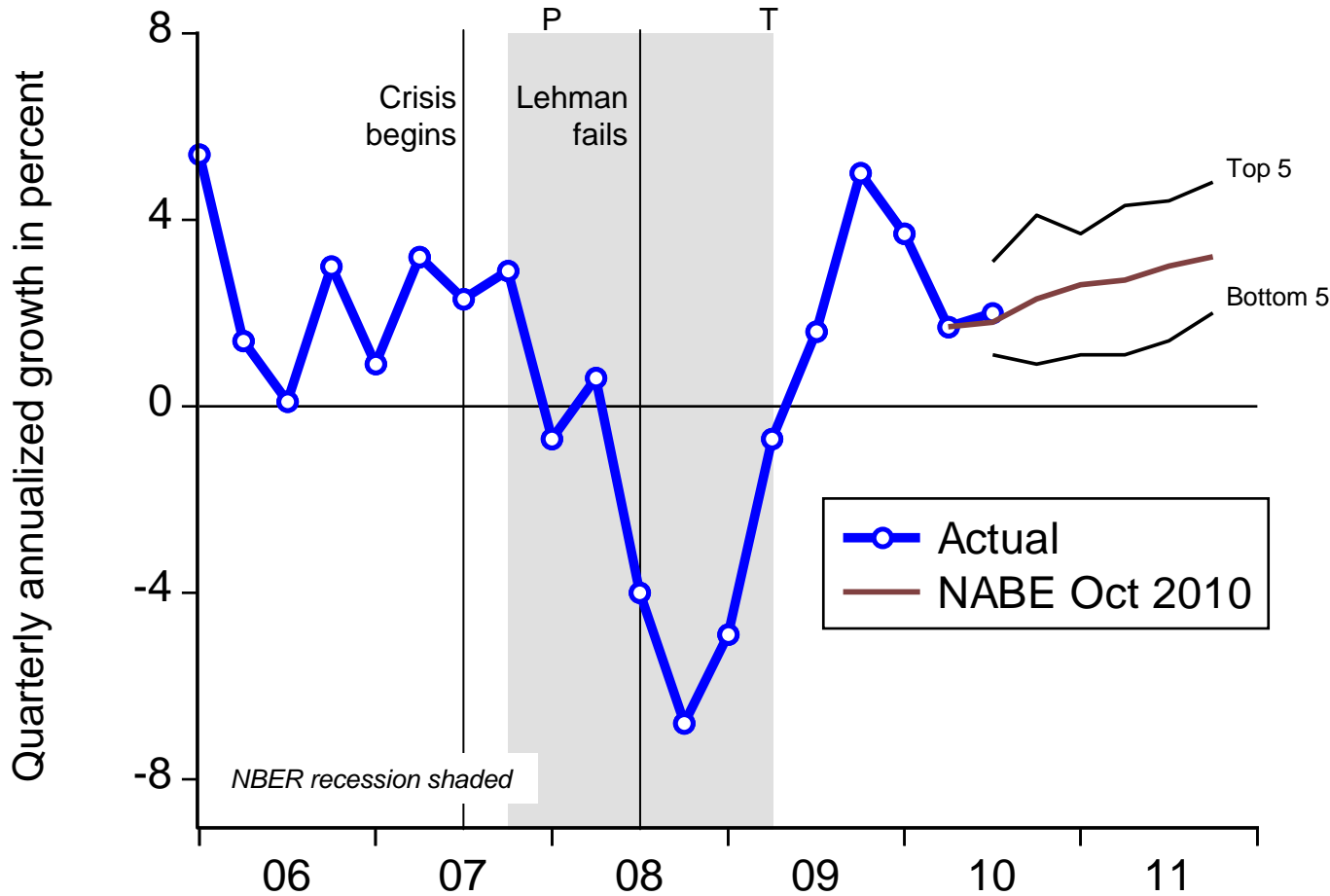
# Real activity (U.S. GDP) in *levels* (peak equals 1.0); the recent recession was worse than any of the prior 10



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Source: Professor Robert Hall, Stanford University and Chair, NBER Dating Committee; Bureau of Economic Analysis, U.S. Department of Commerce; includes 2010Q3P data and NABE forecast revisions through 2011Q4

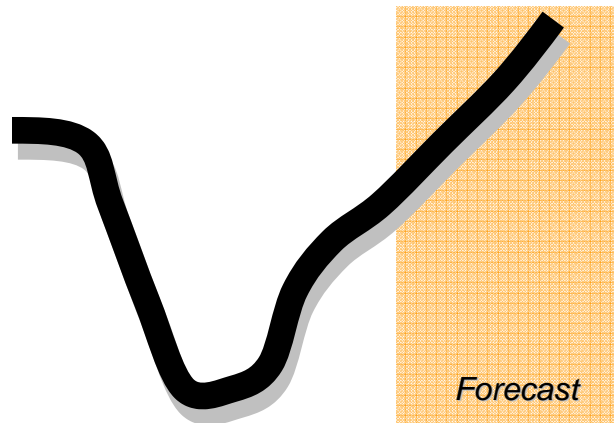
# October 2010 NABE real growth forecasts



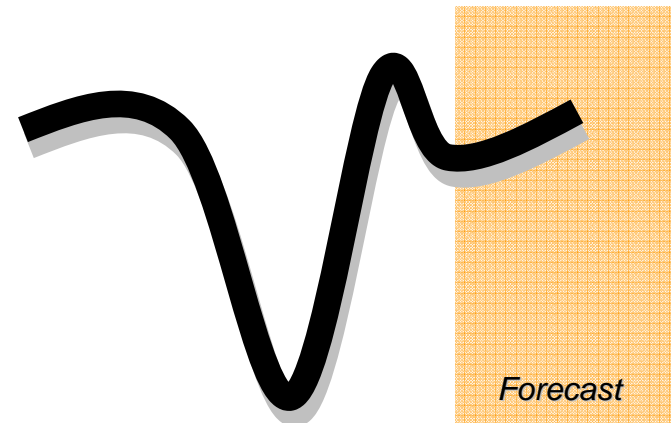
NABE  
forecast  
published  
October 10,  
2010



# U.S. real GDP recovery alphabet: levels and growth

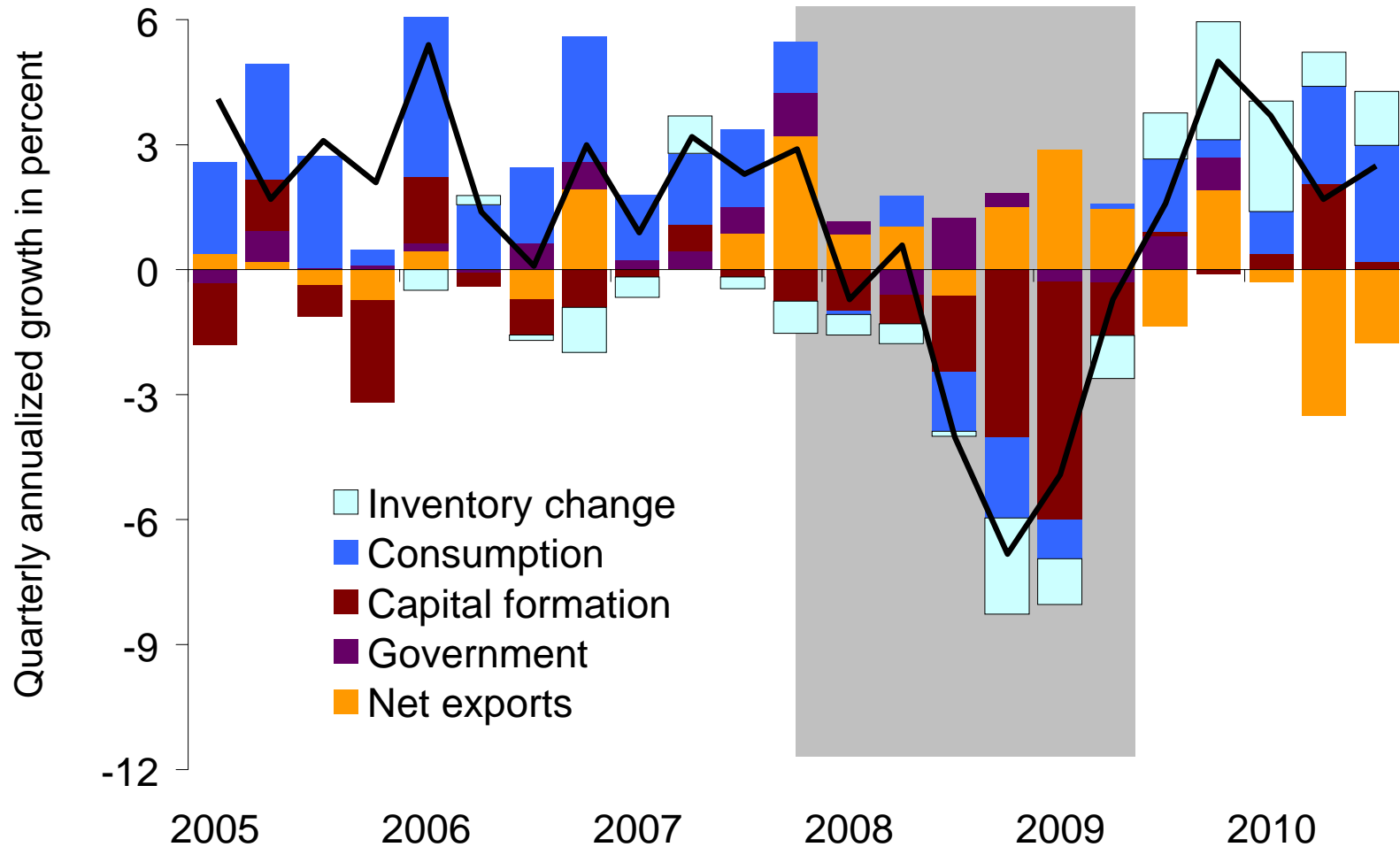


Real GDP in levels  
(trillion chained dollars)



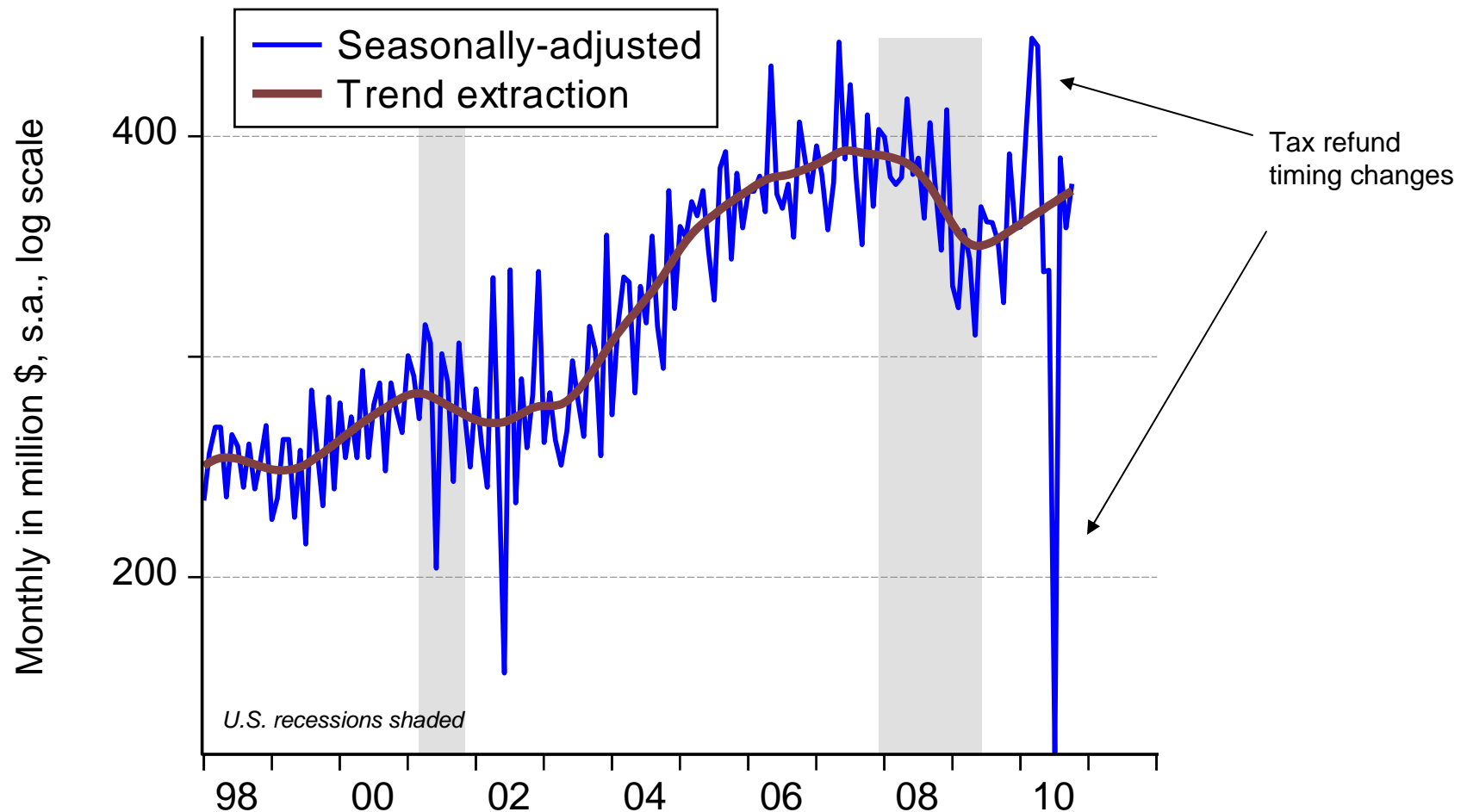
Real GDP growth rate (%)

# U.S. real GDP growth composition through 2010Q3P



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# Hawaii general fund tax revenue: tax refund timing changes can't suppress the recovery trend



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