



We must eliminate  
the distortion caused  
by changing prices

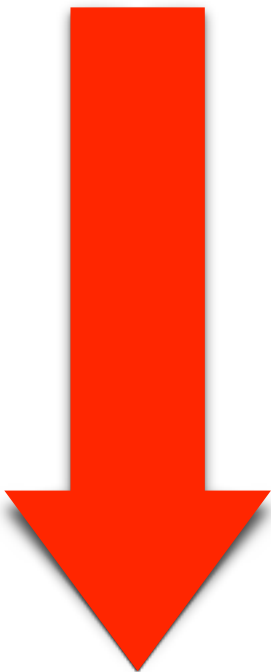
Pretend prices  
did not change

Real GDP



We must use prices



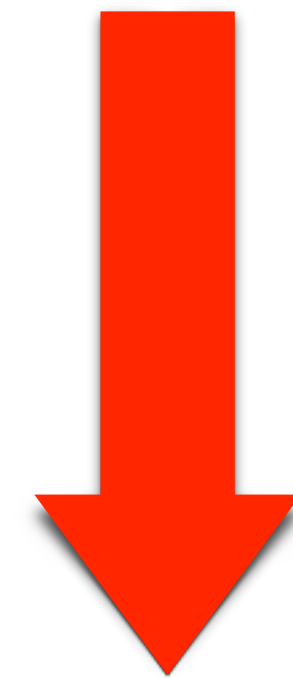


 We **must** use prices

We must **eliminate**  
the distortion caused  
by changing prices



**Pretend** prices  
**did not** change



**Real** GDP



To calculate **Real** GDP first  
we choose a "**base**" year

Year	Price <b>X</b>	Quantity <b>X</b>	Price <b>Y</b>	Quantity <b>Y</b>	Price <b>Z</b>	Quantity <b>Z</b>	Nominal GDP
1	<b>1</b>	<b>100</b>	<b>0.5</b>	<b>50</b>	<b>0.6</b>	<b>10</b>	$(1 \times 100) + (0.5 \times 50) + (0.6 \times 10) = 131$
2	<b>2</b>	<b>100</b>	<b>1</b>	<b>50</b>	<b>1.2</b>	<b>10</b>	$(2 \times 100) + (1 \times 50) + (1.2 \times 10) = 262$
3	<b>4</b>	<b>100</b>	<b>2</b>	<b>50</b>	<b>2.4</b>	<b>10</b>	$(4 \times 100) + (2 \times 50) + (2.4 \times 10) = 524$
4	<b>8</b>	<b>100</b>	<b>4</b>	<b>50</b>	<b>4.8</b>	<b>10</b>	$(8 \times 100) + (4 \times 50) + (4.8 \times 10) = 1,048$