



Stabilizing and destabilizing speculation

Anticipating future demand and supply

Anticipating future demand and supply

- ▶ Speculators are assumed to **anticipate** future movements of prices

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that **less investors willing to sell**

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that less investors willing to sell, a **lower supply**

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that less investors willing to sell, a lower supply, the price should **increase**

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that less investors willing to sell, a lower supply, the price should increase
- ▶ In this case the speculator would buy the asset **now**

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that less investors willing to sell, a lower supply, the price should increase
- ▶ In this case the speculator would buy the asset now and sell it **after** the lower supply of assets has materialised

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that less investors willing to sell, a lower supply, the price should increase
- ▶ In this case the speculator would buy the asset now and sell it after the lower supply of assets has materialised
- ▶ They would increase the price **now**

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that less investors willing to sell, a lower supply, the price should increase
- ▶ In this case the speculator would buy the asset now and sell it after the lower supply of assets has materialised
- ▶ They would increase the price now and reduce it in the **future**

Anticipating future demand and supply

- ▶ Speculators are assumed to anticipate future movements of prices
- ▶ If they anticipate that less investors willing to sell, a lower supply, the price should increase
- ▶ In this case the speculator would buy the asset now and sell it after the lower supply of assets has materialised
- ▶ They would increase the price now and reduce it in the future

Results of speculation

Results of speculation

- ▶ If these actions by speculators **reduce** the price change, it is called a **stabilising speculation**

Results of speculation

- ▶ If these actions by speculators reduce the price change, it is called a stabilising speculation
- ▶ If these actions by speculators **increase** the price change, it is called a **destabilising speculation**

Results of speculation

- ▶ If these actions by speculators reduce the price change, it is called a stabilising speculation
- ▶ If these actions by speculators increase the price change, it is called a destabilising speculation
- ▶ If the demand by speculators is **low**, it will be stabilising

Results of speculation

- ▶ If these actions by speculators reduce the price change, it is called a stabilising speculation
- ▶ If these actions by speculators increase the price change, it is called a destabilising speculation
- ▶ If the demand by speculators is low, it will be stabilising
- ▶ If the demand by speculators is **high**, it may become destabilising

Results of speculation

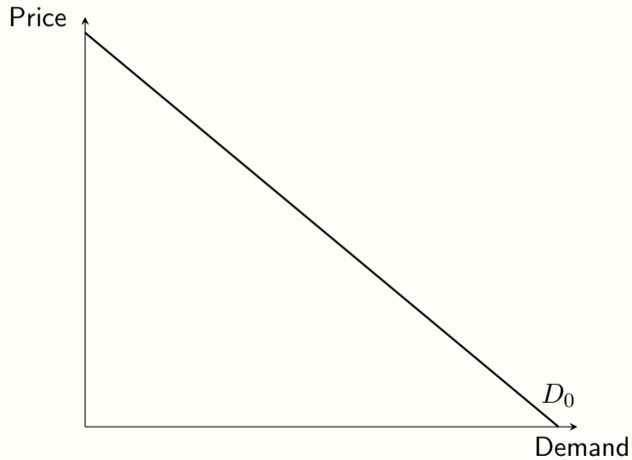
- ▶ If these actions by speculators reduce the price change, it is called a stabilising speculation
- ▶ If these actions by speculators increase the price change, it is called a destabilising speculation
- ▶ If the demand by speculators is low, it will be stabilising
- ▶ If the demand by speculators is high, it may become destabilising

Profitable stabilizing speculation

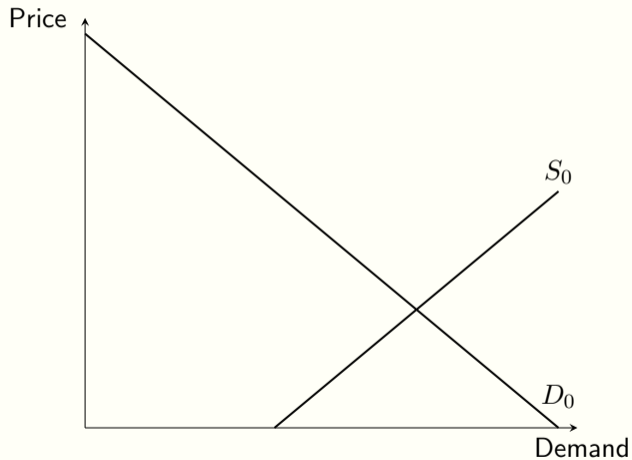
Profitable stabilizing speculation



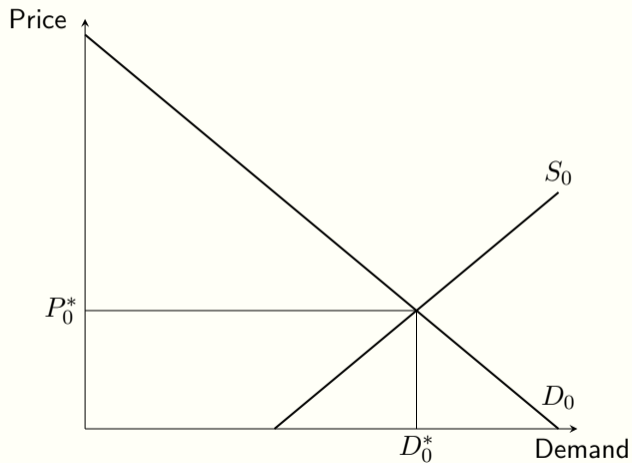
Profitable stabilizing speculation



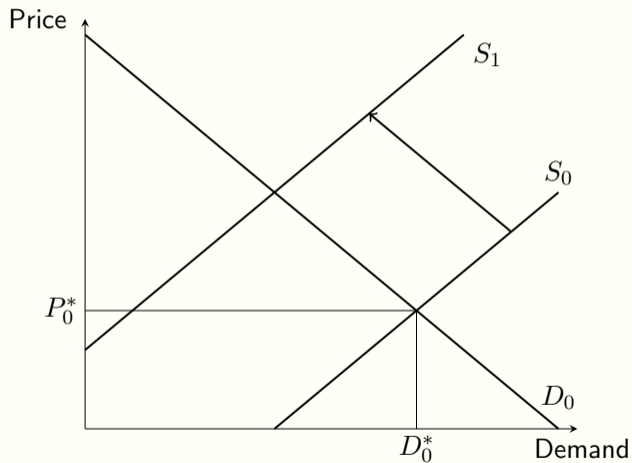
Profitable stabilizing speculation



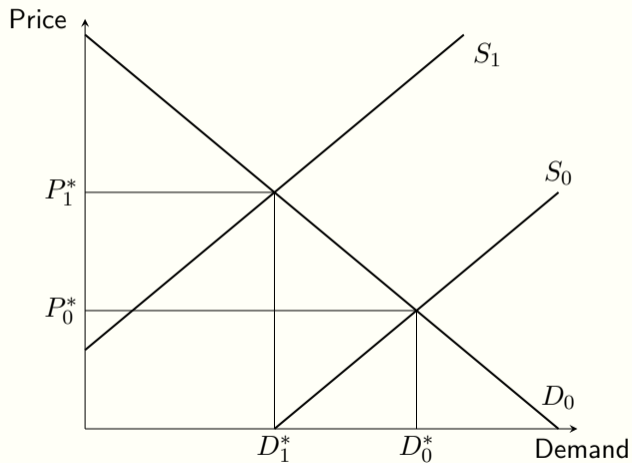
Profitable stabilizing speculation



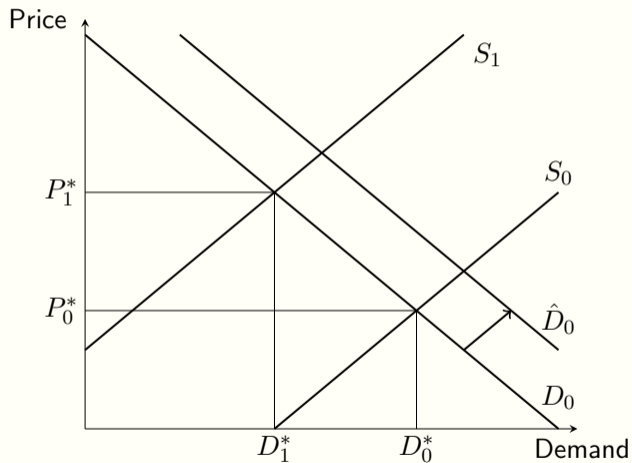
Profitable stabilizing speculation



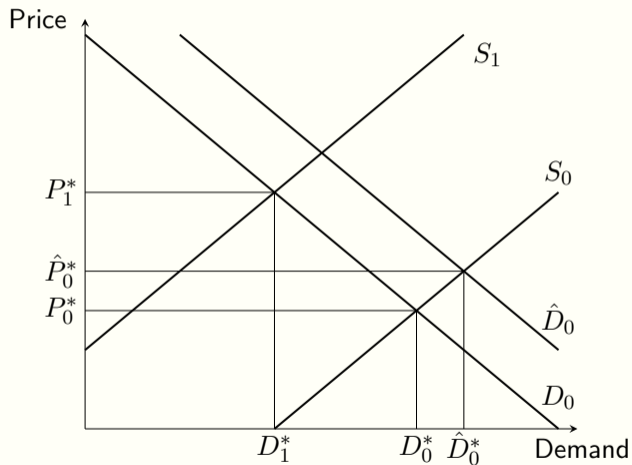
Profitable stabilizing speculation



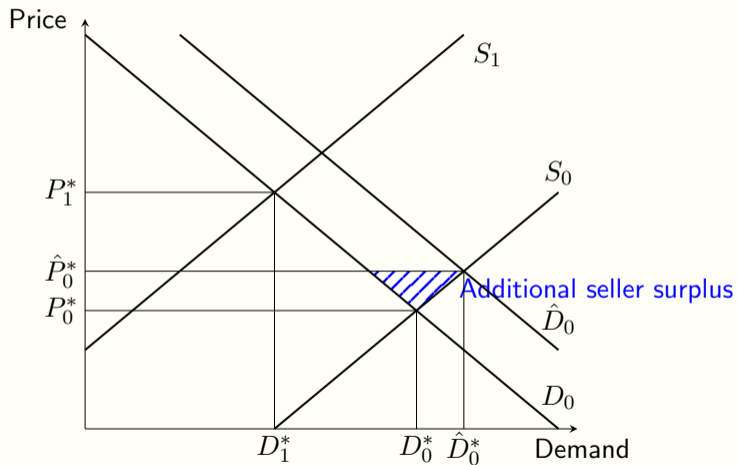
Profitable stabilizing speculation



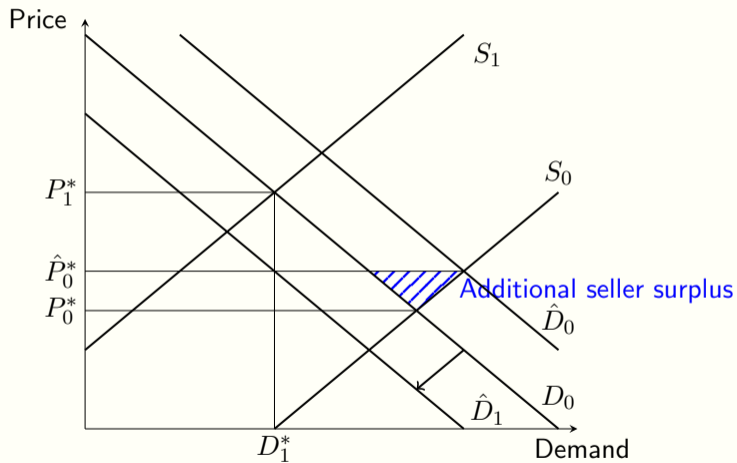
Profitable stabilizing speculation



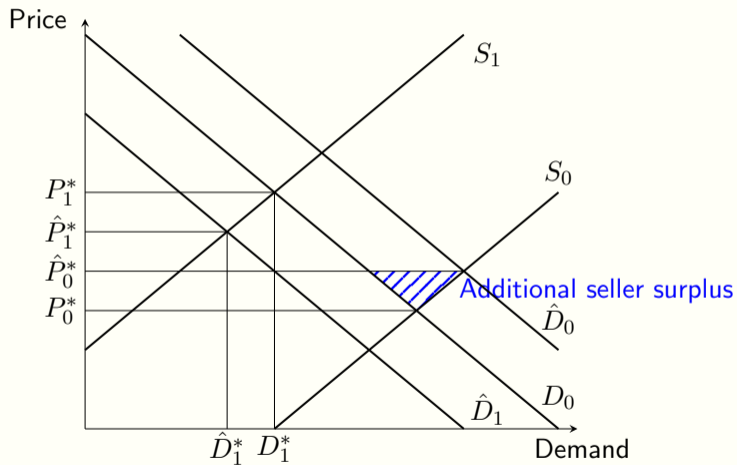
Profitable stabilizing speculation



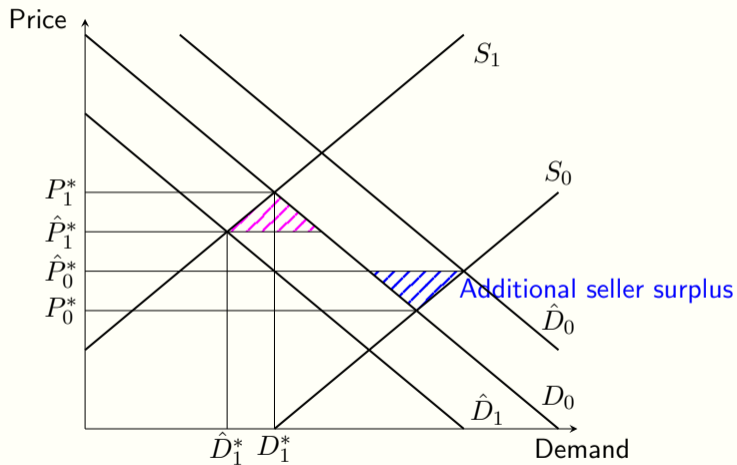
Profitable stabilizing speculation



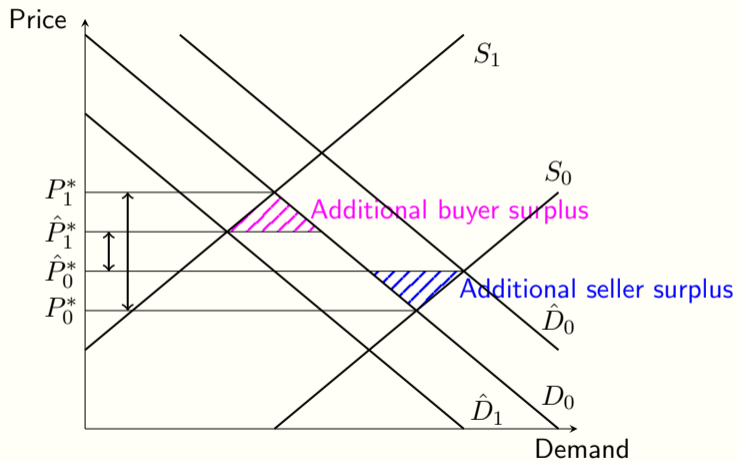
Profitable stabilizing speculation



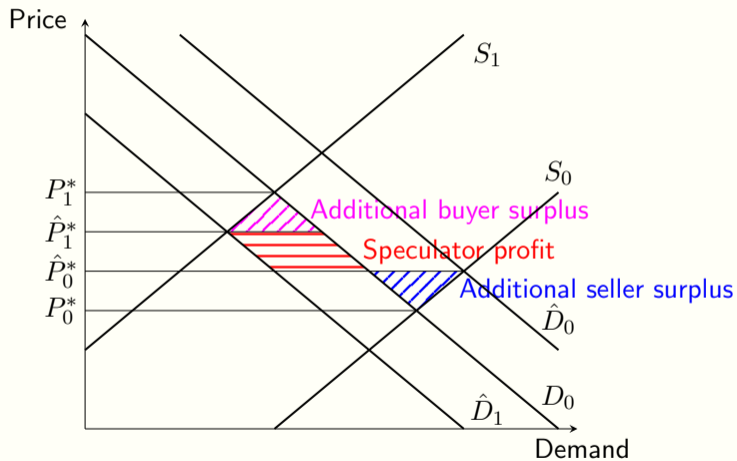
Profitable stabilizing speculation



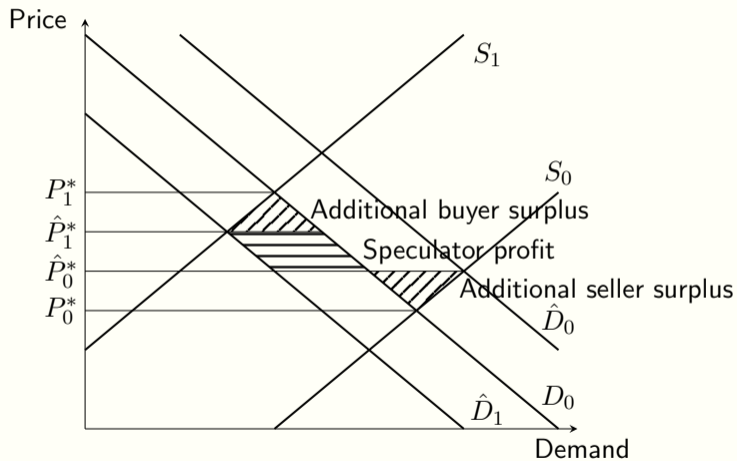
Profitable stabilizing speculation



Profitable stabilizing speculation



Profitable stabilizing speculation



Welfare increases for all market participants

Welfare increases for all market participants

- ▶ If the demand by speculators is low, they will **reduce** the price movement between time periods

Welfare increases for all market participants

- ▶ If the demand by speculators is low, they will reduce the price movement between time periods
- ▶ Speculation increases the welfare of **sellers** in the first time period as the price they obtain increases

Welfare increases for all market participants

- ▶ If the demand by speculators is low, they will reduce the price movement between time periods
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of **buyers** in the second time period as the price they pay decreases

Welfare increases for all market participants

- ▶ If the demand by speculators is low, they will reduce the price movement between time periods
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a **profit** from their activity as they buy at a lower price than they sell

Welfare increases for all market participants

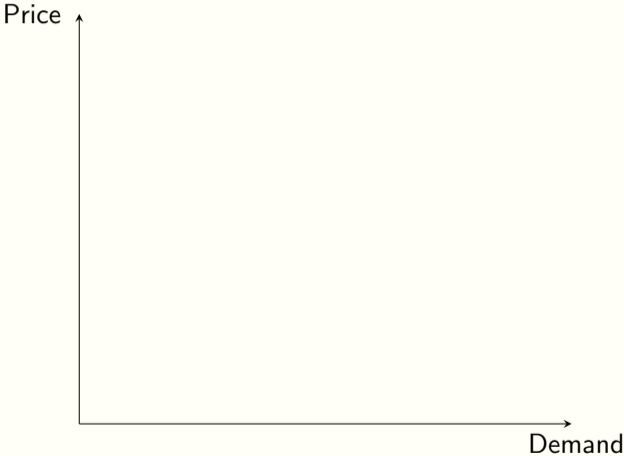
- ▶ If the demand by speculators is low, they will reduce the price movement between time periods
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a profit from their activity as they buy at a lower price than they sell
- ▶ The overall **welfare improves** from speculation

Welfare increases for all market participants

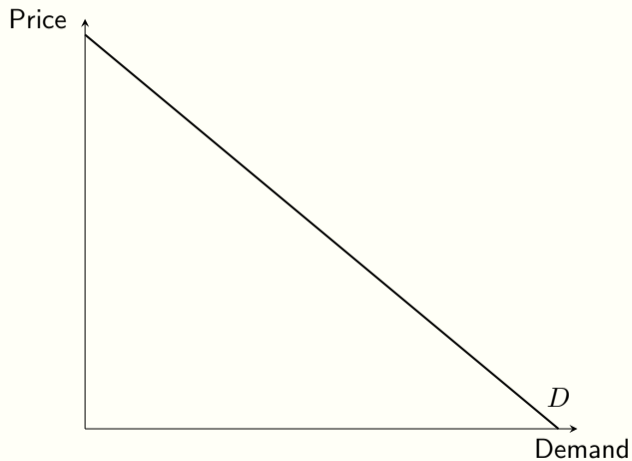
- ▶ If the demand by speculators is low, they will reduce the price movement between time periods
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a profit from their activity as they buy at a lower price than they sell
- ▶ The overall welfare improves from speculation

Loss-making stabilizing speculation

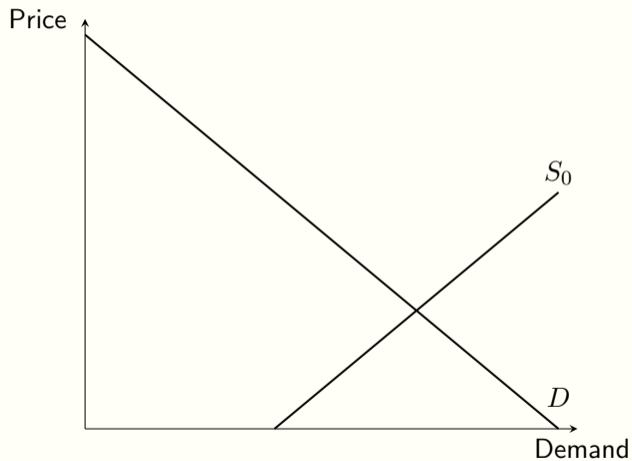
Loss-making stabilizing speculation



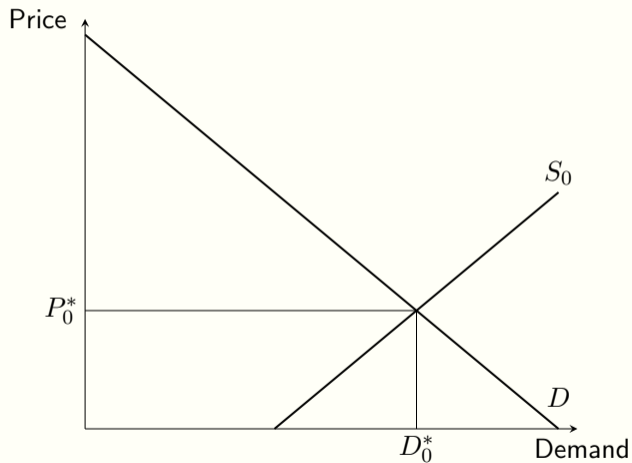
Loss-making stabilizing speculation



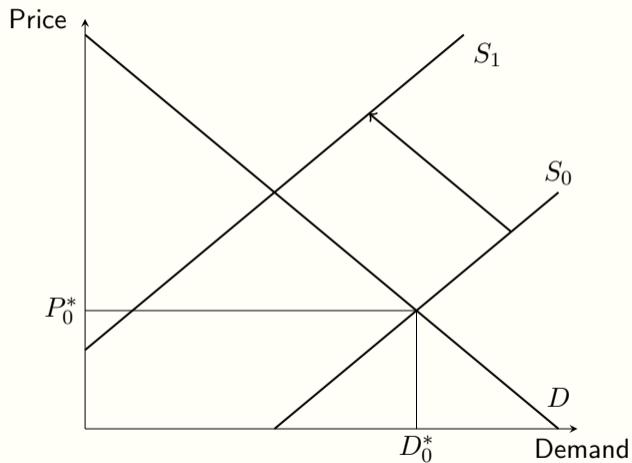
Loss-making stabilizing speculation



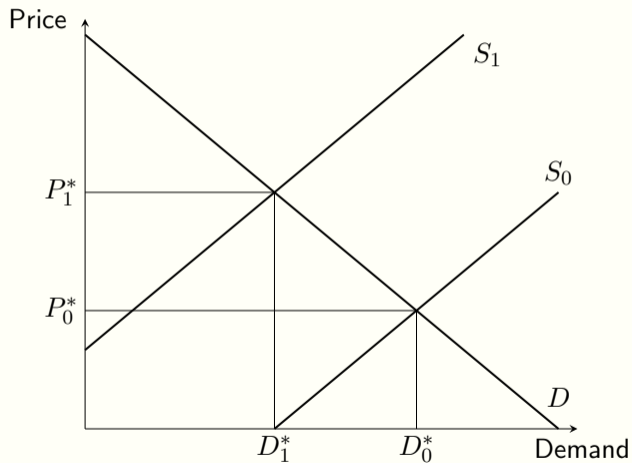
Loss-making stabilizing speculation



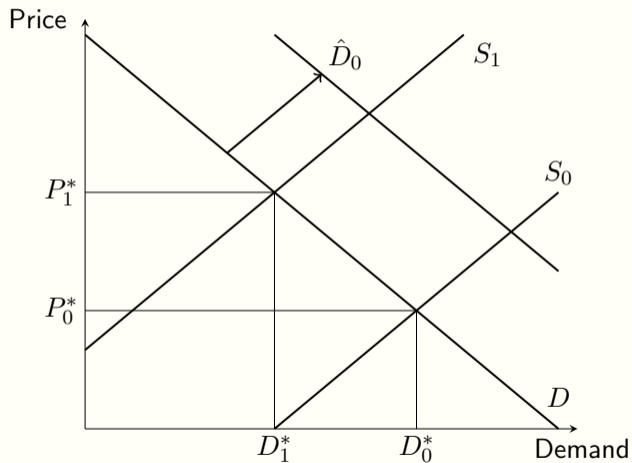
Loss-making stabilizing speculation



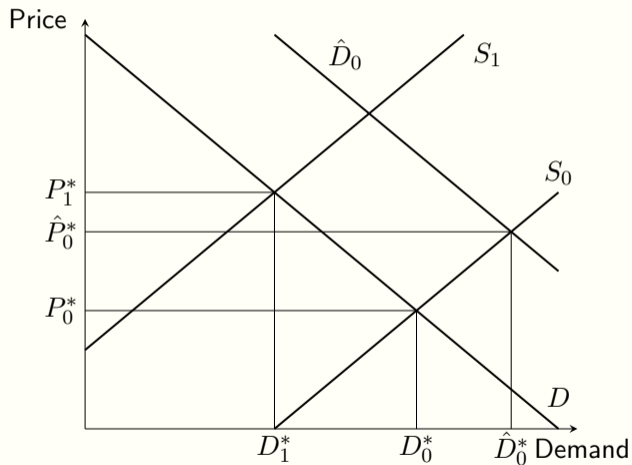
Loss-making stabilizing speculation



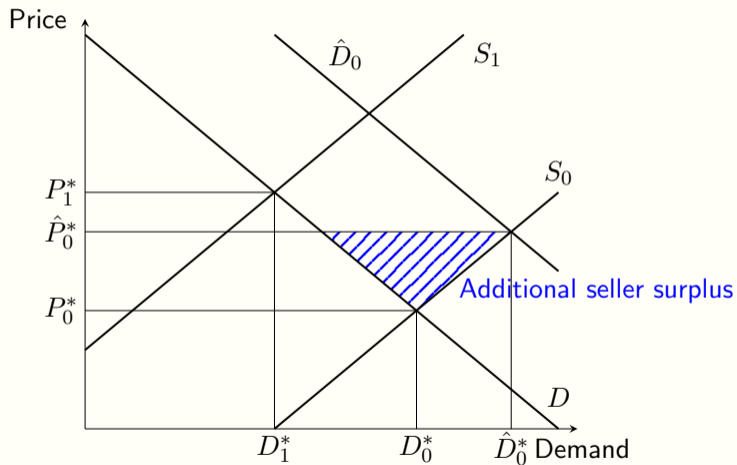
Loss-making stabilizing speculation



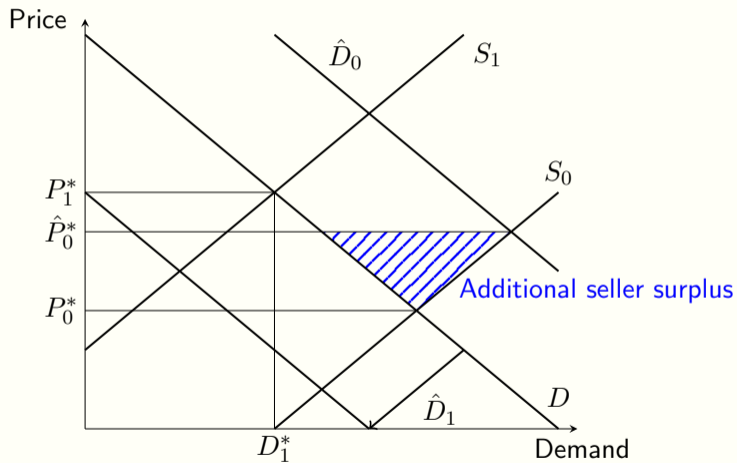
Loss-making stabilizing speculation



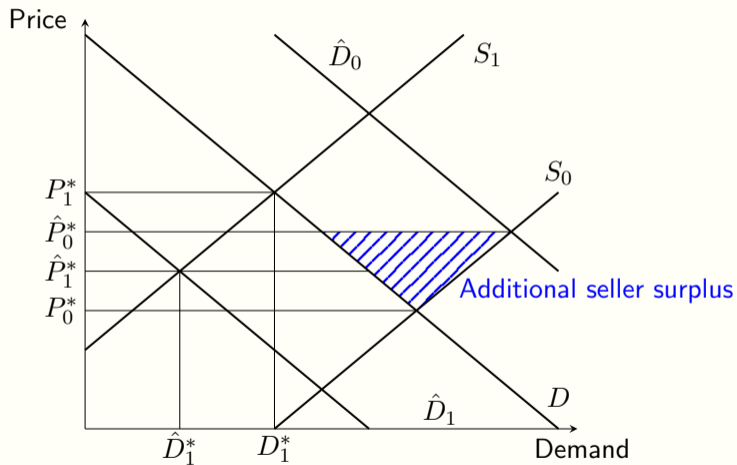
Loss-making stabilizing speculation



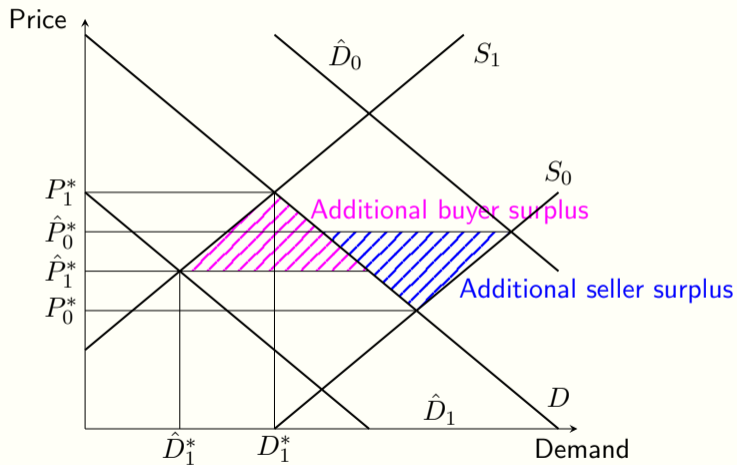
Loss-making stabilizing speculation



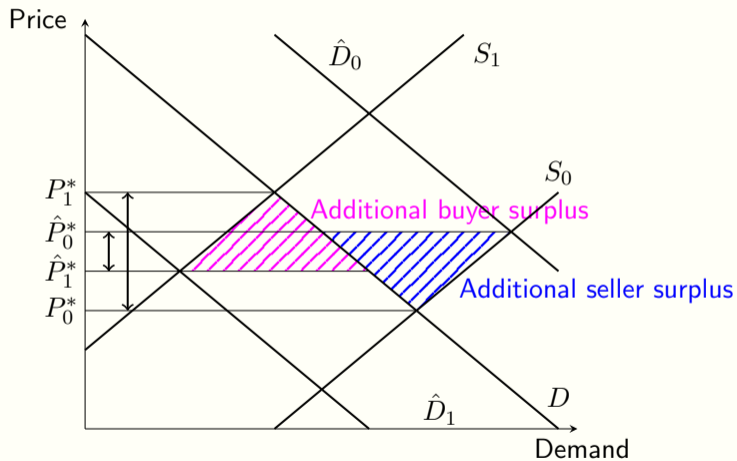
Loss-making stabilizing speculation



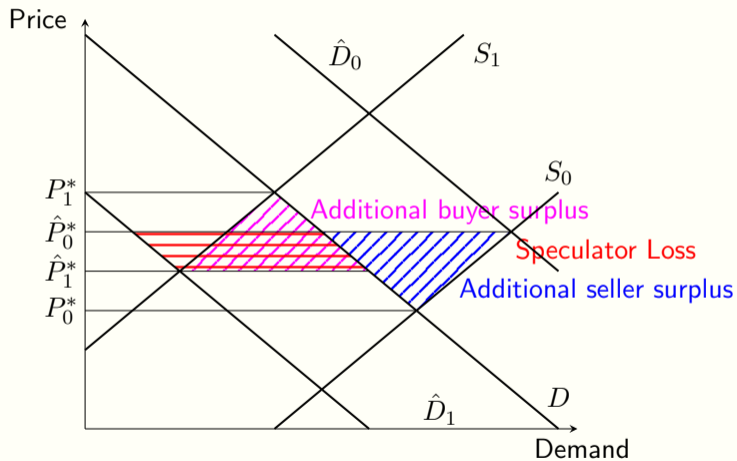
Loss-making stabilizing speculation



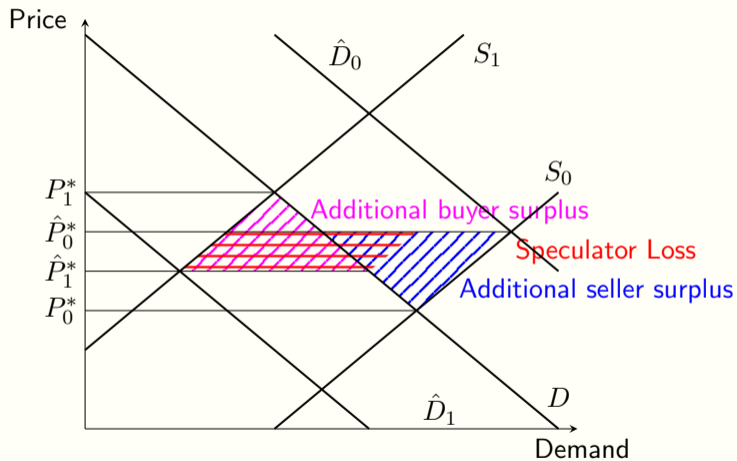
Loss-making stabilizing speculation



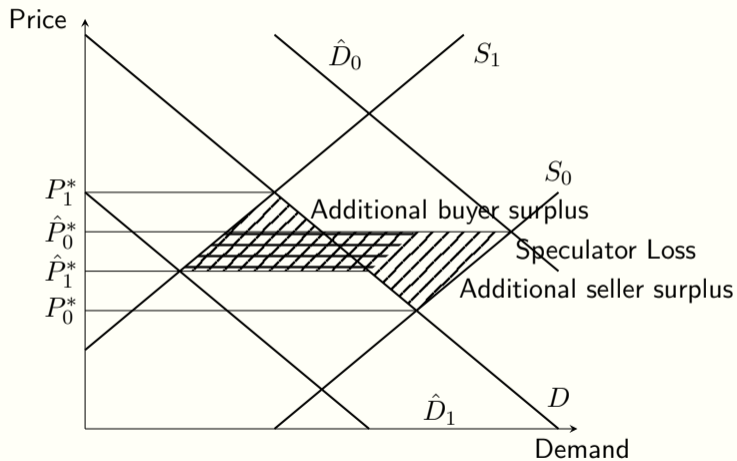
Loss-making stabilizing speculation



Loss-making stabilizing speculation



Loss-making stabilizing speculation



Welfare increases for all non-speculators

Welfare increases for all non-speculators

- ▶ If the demand by speculators is high, they will **reduce** the price movement between time periods

Welfare increases for all non-speculators

- ▶ If the demand by speculators is high, they will reduce the price movement between time periods
- ▶ The price change **reverses** from increasing to decreasing, but is in a lower range

Welfare increases for all non-speculators

- ▶ If the demand by speculators is high, they will reduce the price movement between time periods
- ▶ The price change reverses from increasing to decreasing, but is in a lower range
- ▶ Speculation increases the welfare of **sellers** in the first time period as the price they obtain increases

Welfare increases for all non-speculators

- ▶ If the demand by speculators is high, they will reduce the price movement between time periods
- ▶ The price change reverses from increasing to decreasing, but is in a lower range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of **buyers** in the second time period as the price they pay decreases

Welfare increases for all non-speculators

- ▶ If the demand by speculators is high, they will reduce the price movement between time periods
- ▶ The price change reverses from increasing to decreasing, but is in a lower range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a **loss** from their activity as they buy at a higher price than they sell

Welfare increases for all non-speculators

- ▶ If the demand by speculators is high, they will reduce the price movement between time periods
- ▶ The price change reverses from increasing to decreasing, but is in a lower range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a loss from their activity as they buy at a higher price than they sell
- ▶ The overall **welfare improves** from speculation as the losses of speculators do not outweigh the gains for buyers and sellers

Welfare increases for all non-speculators

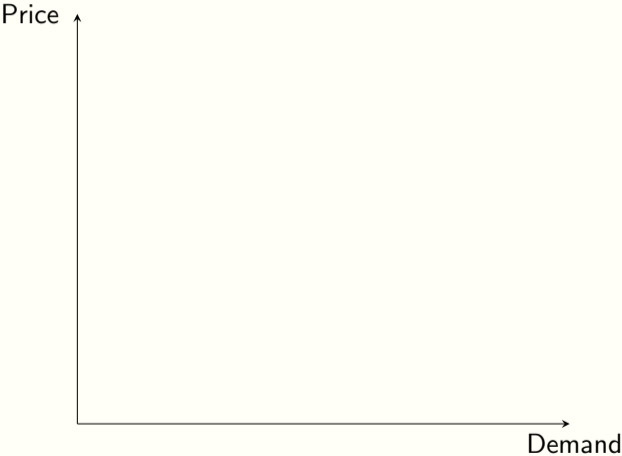
- ▶ If the demand by speculators is high, they will reduce the price movement between time periods
- ▶ The price change reverses from increasing to decreasing, but is in a lower range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a loss from their activity as they buy at a higher price than they sell
- ▶ The overall welfare improves from speculation as the losses of speculators do not outweigh the gains for buyers and sellers
- ▶ Stabilising speculation is always **welfare-increasing**

Welfare increases for all non-speculators

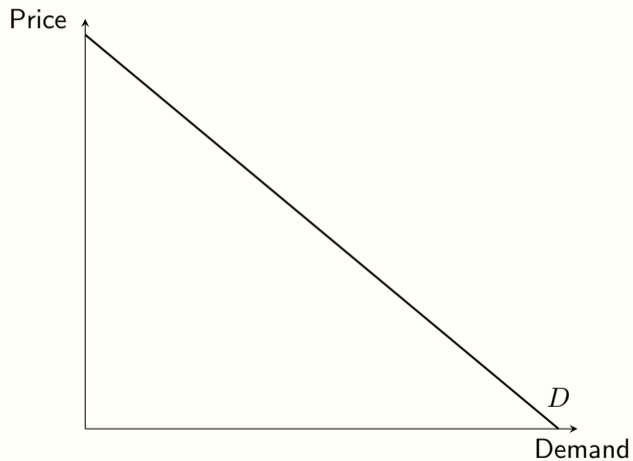
- ▶ If the demand by speculators is high, they will reduce the price movement between time periods
- ▶ The price change reverses from increasing to decreasing, but is in a lower range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a loss from their activity as they buy at a higher price than they sell
- ▶ The overall welfare improves from speculation as the losses of speculators do not outweigh the gains for buyers and sellers
- ▶ Stabilising speculation is always welfare-increasing

Destabilizing speculation

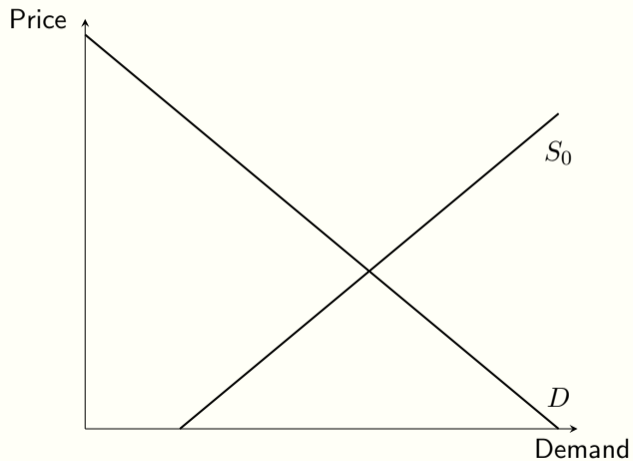
Destabilizing speculation



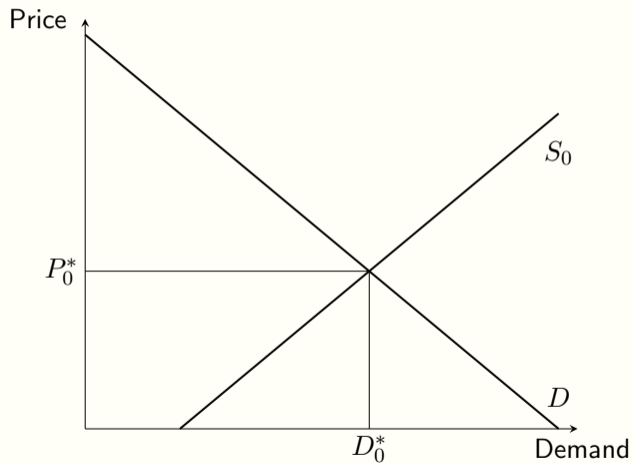
Destabilizing speculation



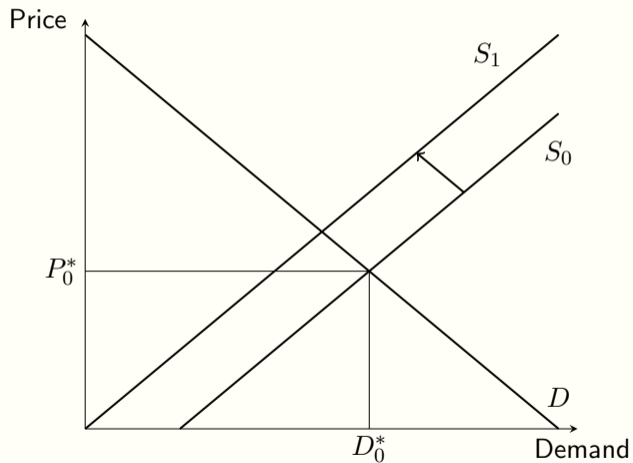
Destabilizing speculation



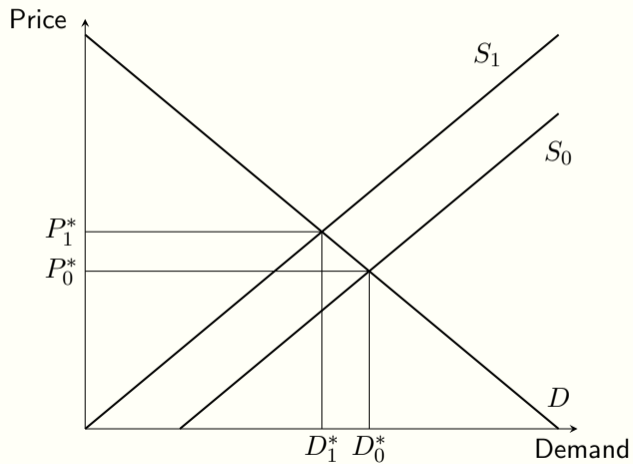
Destabilizing speculation



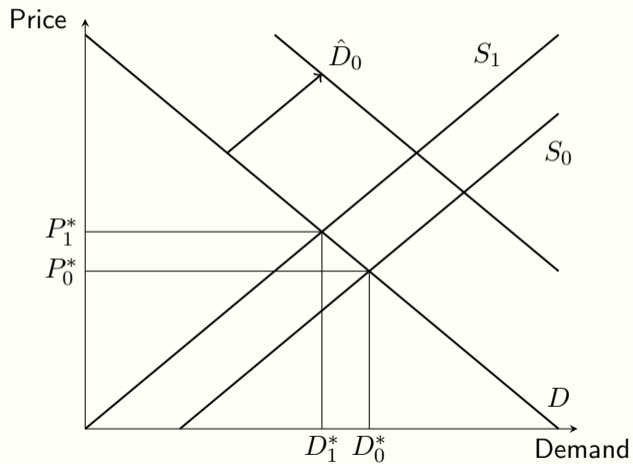
Destabilizing speculation



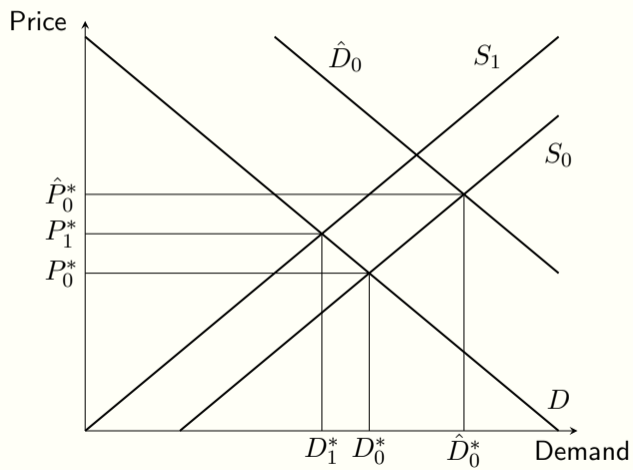
Destabilizing speculation



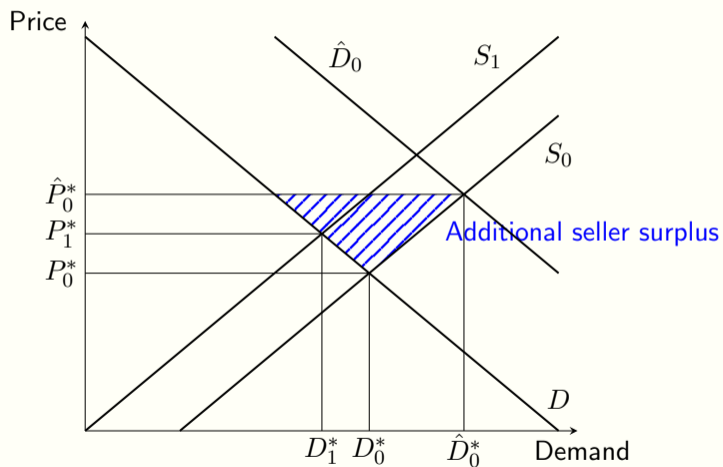
Destabilizing speculation



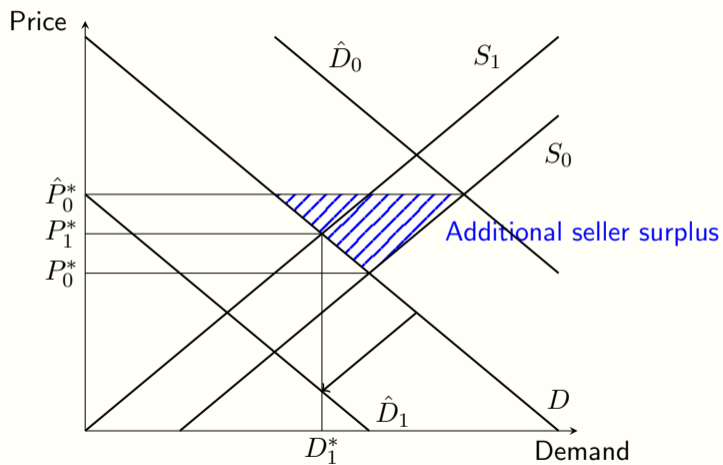
Destabilizing speculation



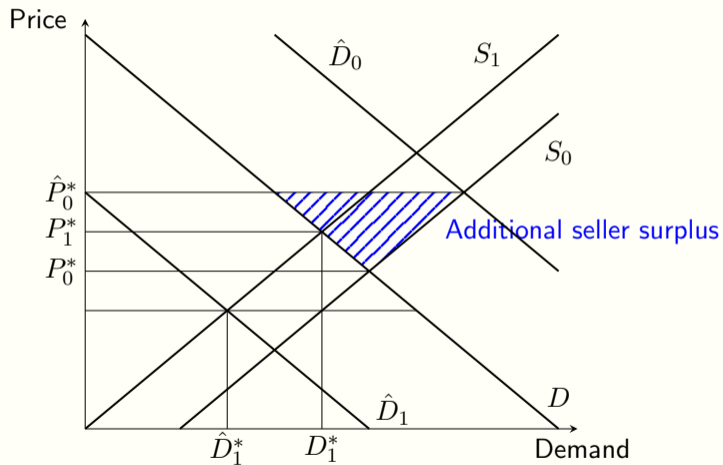
Destabilizing speculation



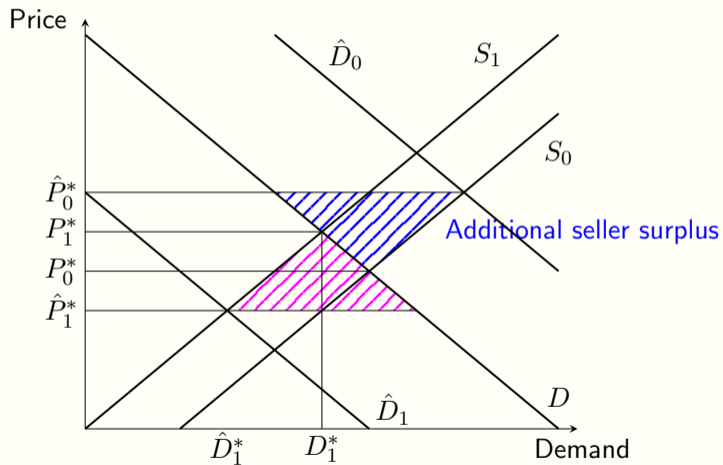
Destabilizing speculation



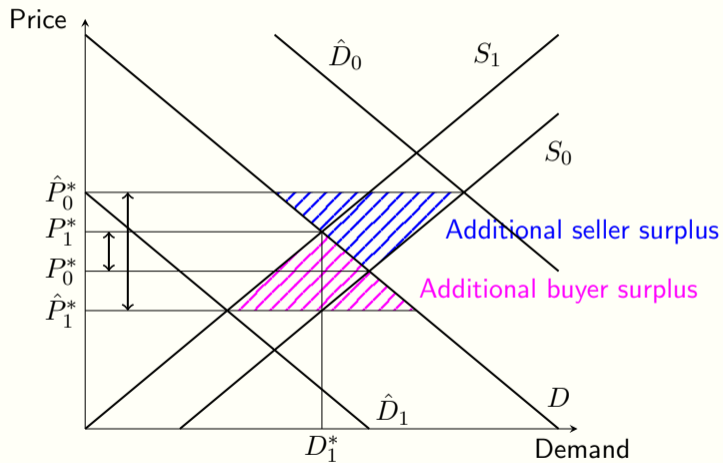
Destabilizing speculation



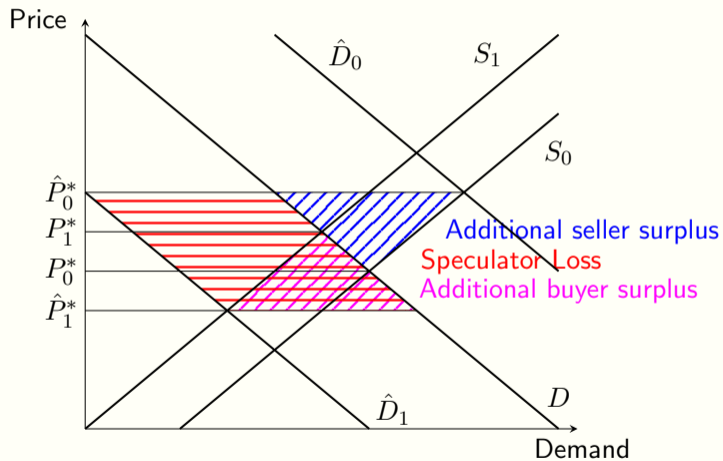
Destabilizing speculation



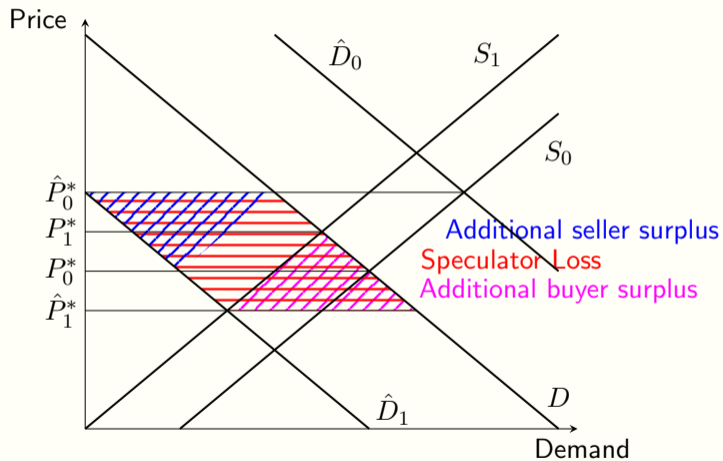
Destabilizing speculation



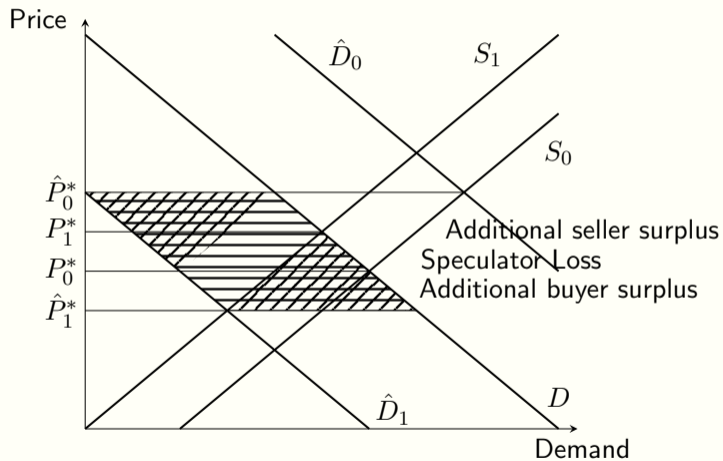
Destabilizing speculation



Destabilizing speculation



Destabilizing speculation



Welfare increases for all non-speculators

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will **increase** the price movement between time periods

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will increase the price movement between time periods
- ▶ The price change **reverses** from increasing to decreasing and is in a wider range

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will increase the price movement between time periods
- ▶ The price change reverses from increasing to decreasing and is in a wider range
- ▶ Speculation increases the welfare of **sellers** in the first time period as the price they obtain increases

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will increase the price movement between time periods
- ▶ The price change reverses from increasing to decreasing and is in a wider range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of **buyers** in the second time period as the price they pay decreases

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will increase the price movement between time periods
- ▶ The price change reverses from increasing to decreasing and is in a wider range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a **loss** from their activity as they buy at a higher price than they sell

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will increase the price movement between time periods
- ▶ The price change reverses from increasing to decreasing and is in a wider range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a loss from their activity as they buy at a higher price than they sell
- ▶ The overall **welfare reduces** from speculation as the losses of speculators do outweigh the gains for buyers and sellers

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will increase the price movement between time periods
- ▶ The price change reverses from increasing to decreasing and is in a wider range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a loss from their activity as they buy at a higher price than they sell
- ▶ The overall welfare reduces from speculation as the losses of speculators do outweigh the gains for buyers and sellers
- ▶ Destabilising speculation is always **welfare-reducing**

Welfare increases for all non-speculators

- ▶ If the demand by speculators is very high, they will increase the price movement between time periods
- ▶ The price change reverses from increasing to decreasing and is in a wider range
- ▶ Speculation increases the welfare of sellers in the first time period as the price they obtain increases
- ▶ Speculation increases the welfare of buyers in the second time period as the price they pay decreases
- ▶ Speculators make a loss from their activity as they buy at a higher price than they sell
- ▶ The overall welfare reduces from speculation as the losses of speculators do outweigh the gains for buyers and sellers
- ▶ Destabilising speculation is always welfare-reducing

Welfare effects of speculators

Welfare effects of speculators

- ▶ Stabilising speculation **increases** overall welfare

Welfare effects of speculators

- ▶ Stabilising speculation increases overall welfare, while destabilising speculation **decreases** overall welfare

Welfare effects of speculators

- ▶ Stabilising speculation increases overall welfare, while destabilising speculation decreases overall welfare
- ▶ The welfare of **non-speculators** is always increasing as they can sell at higher prices and buy at lower prices

Welfare effects of speculators

- ▶ Stabilising speculation increases overall welfare, while destabilising speculation decreases overall welfare
- ▶ The welfare of non-speculators is always increasing as they can sell at higher prices and buy at lower prices
- ▶ Speculation becomes **welfare-reducing** if too much speculation is conducted, but non-speculators always benefit

Welfare effects of speculators

- ▶ Stabilising speculation increases overall welfare, while destabilising speculation decreases overall welfare
- ▶ The welfare of non-speculators is always increasing as they can sell at higher prices and buy at lower prices
- ▶ Speculation becomes welfare-reducing if too much speculation is conducted, but non-speculators always benefit



Copyright © by Andreas Krause

Picture credits:

Cover: Tobias Deml, CC BY-SA 4.0 <https://creativecommons.org/licenses/by-sa/4.0>, via Wikimedia Commons, https://upload.wikimedia.org/wikipedia/commons/2/26/Gaming-Wall-Street_BTS_Prodigium-266.jpg

Back: Michael Vadon, CC BY 2.0 <https://creativecommons.org/licenses/by/2.0/>, via Wikimedia Commons, [https://upload.wikimedia.org/wikipedia/commons/9/97/Manhattan\(NYC-New-York-City\)Skyline\(31769153946\).jpg](https://upload.wikimedia.org/wikipedia/commons/9/97/Manhattan(NYC-New-York-City)Skyline(31769153946).jpg)

Andreas Krause
Department of Economics
University of Bath
Claverton Down
Bath BA2 7AY
United Kingdom

E-mail: mnsak@bath.ac.uk