

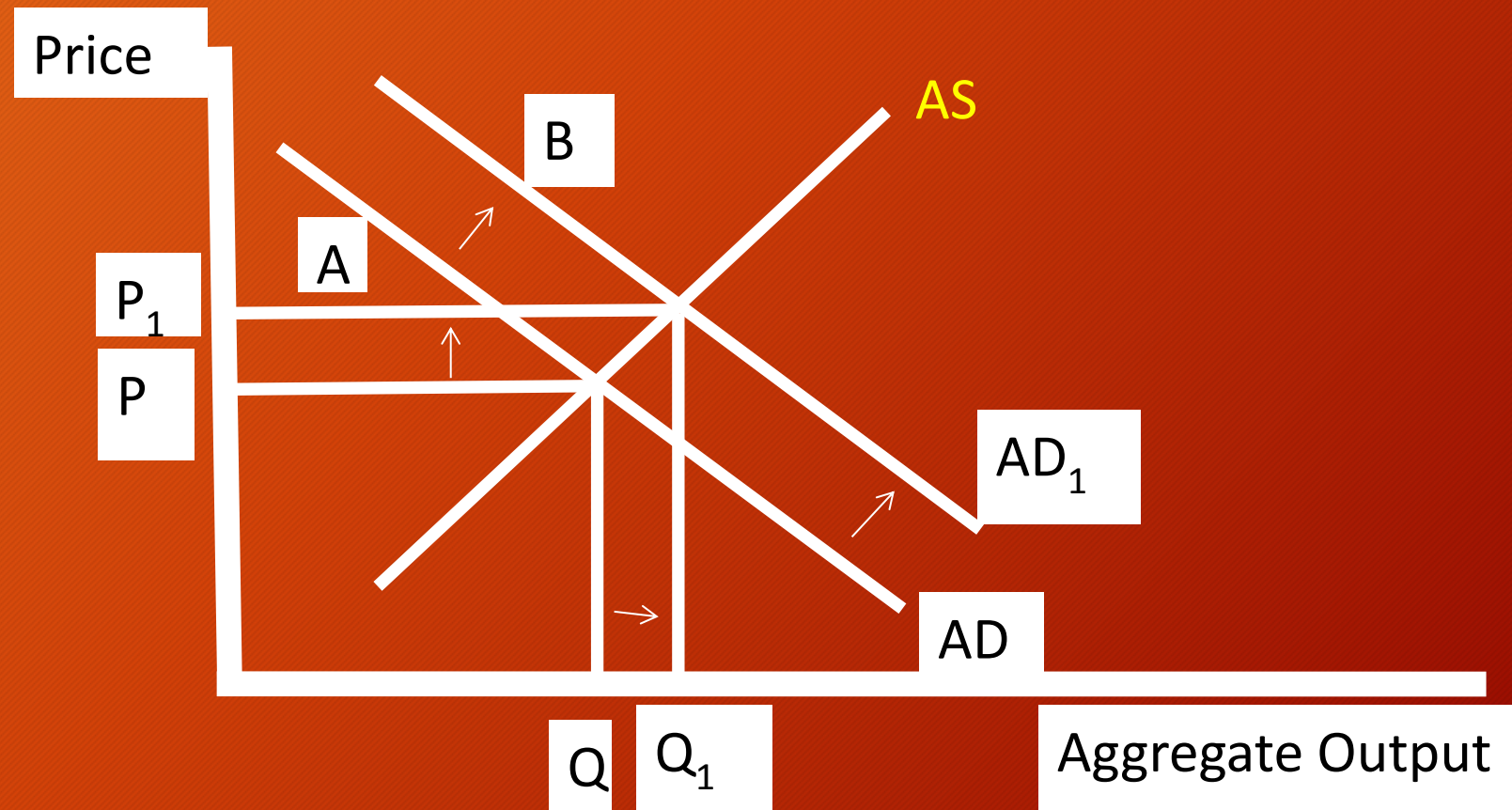
Inflation in Pakistan: Money or Oil Prices

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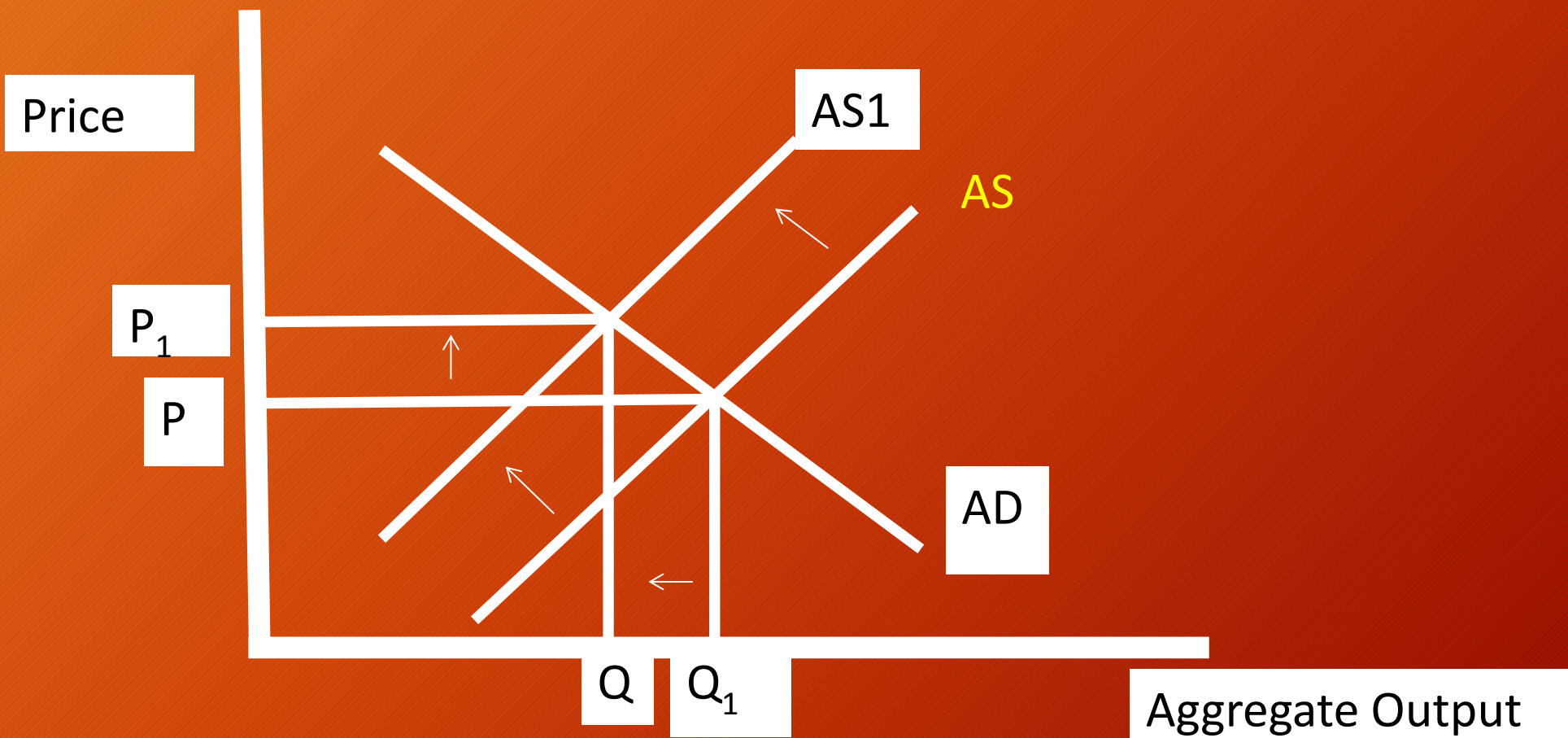
Introduction

- Inflation - Worst Enemy
- Affects ER, BOP, Asset Prices
- Create Money Illusion
- Distorts price mechanisms
- Problems for investors
- Researchers try to find its determinants

Demand Side



Supply Side



Money is sole determinant of Inflation

- Money Supply
- Bottlenecks (Structuralist View)
- Fiscal Deficit
- Oil Prices

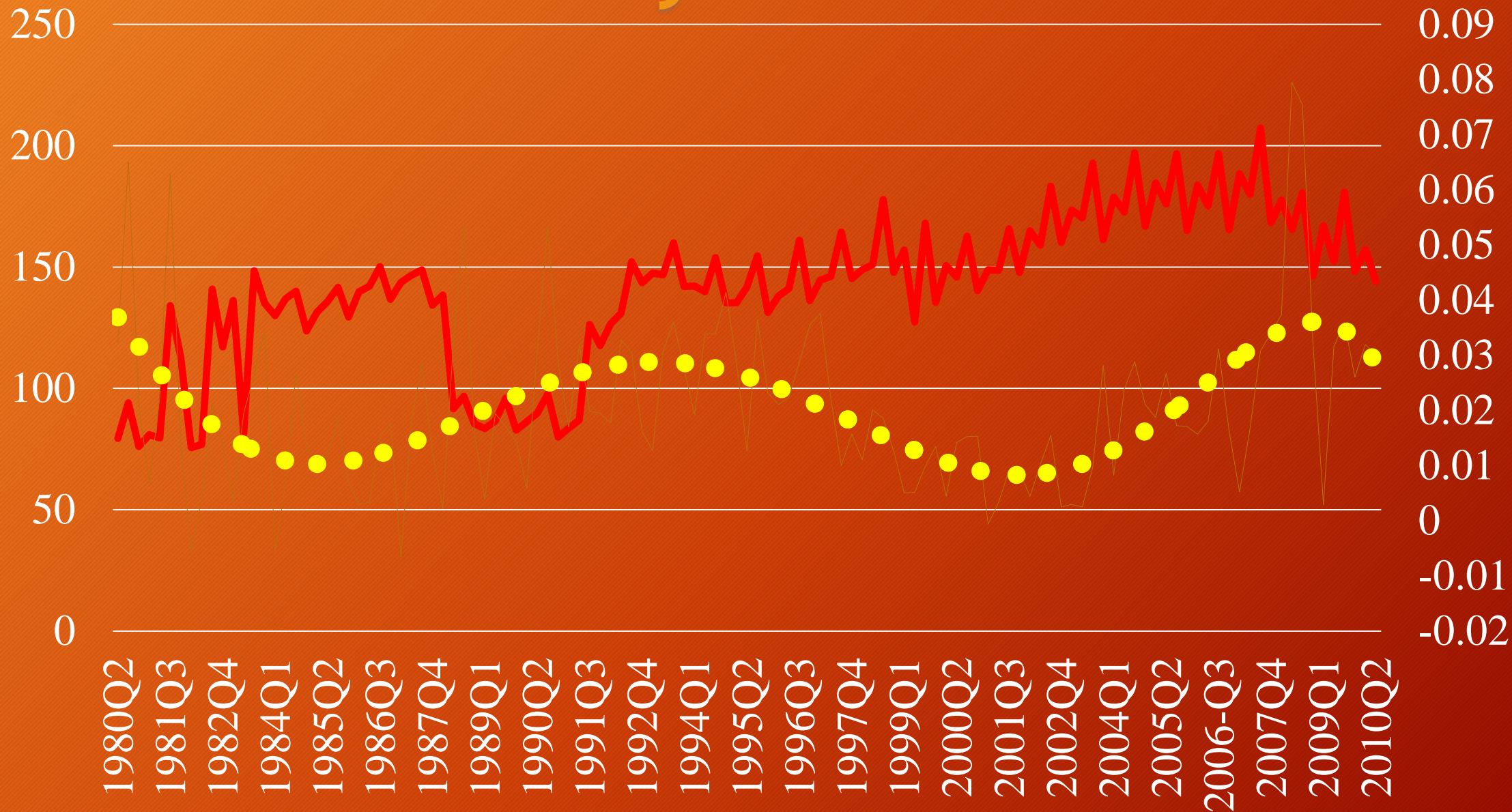
Objectives

Impact of oil on inflation
Impact of money supply on inflation

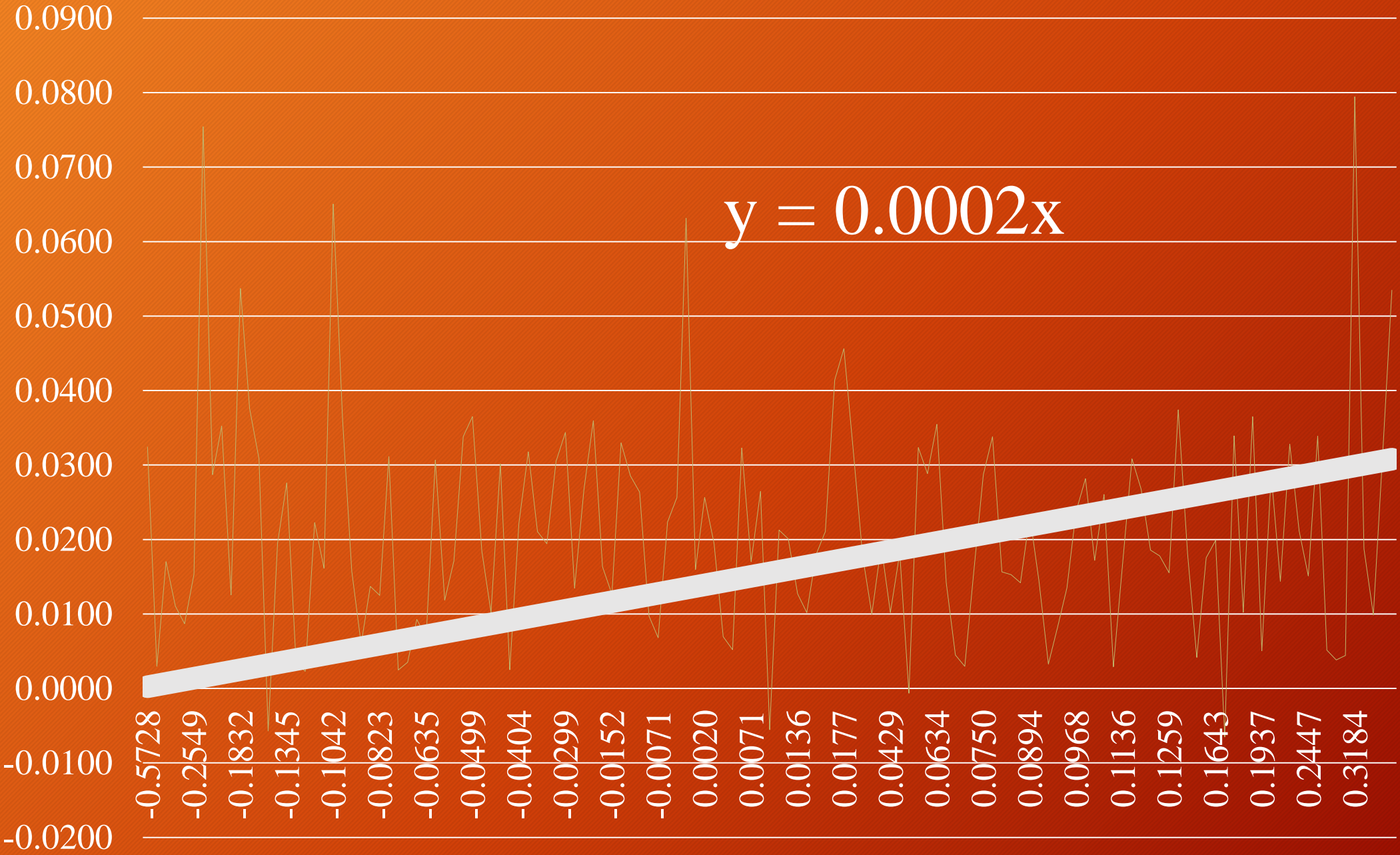
Descriptive Analysis

| | 1980-87 | | | 1988-2001Q1 | | | 2001Q2-2013 | | |
|-------------------|-----------|-----------|-----------|-------------|-----------|-----------|-------------|-----------|-----------|
| Variables | AG | CG | CV | AG | CG | CV | AG | CG | CV |
| M2 | 7.25 | 5.02 | 2.97 | 3.74 | 3.35 | 2.3 | 3.67 | 3.52 | 0.81 |
| CPI | 1.69 | 1.57 | 0.97 | 2.23 | 2.22 | 0.54 | 2.19 | 2.15 | 0.71 |
| Oil Prices | -1.45 | -2.66 | -9.48 | 3.26 | 1.26 | 7.9 | 4.18 | 2.53 | 3.92 |

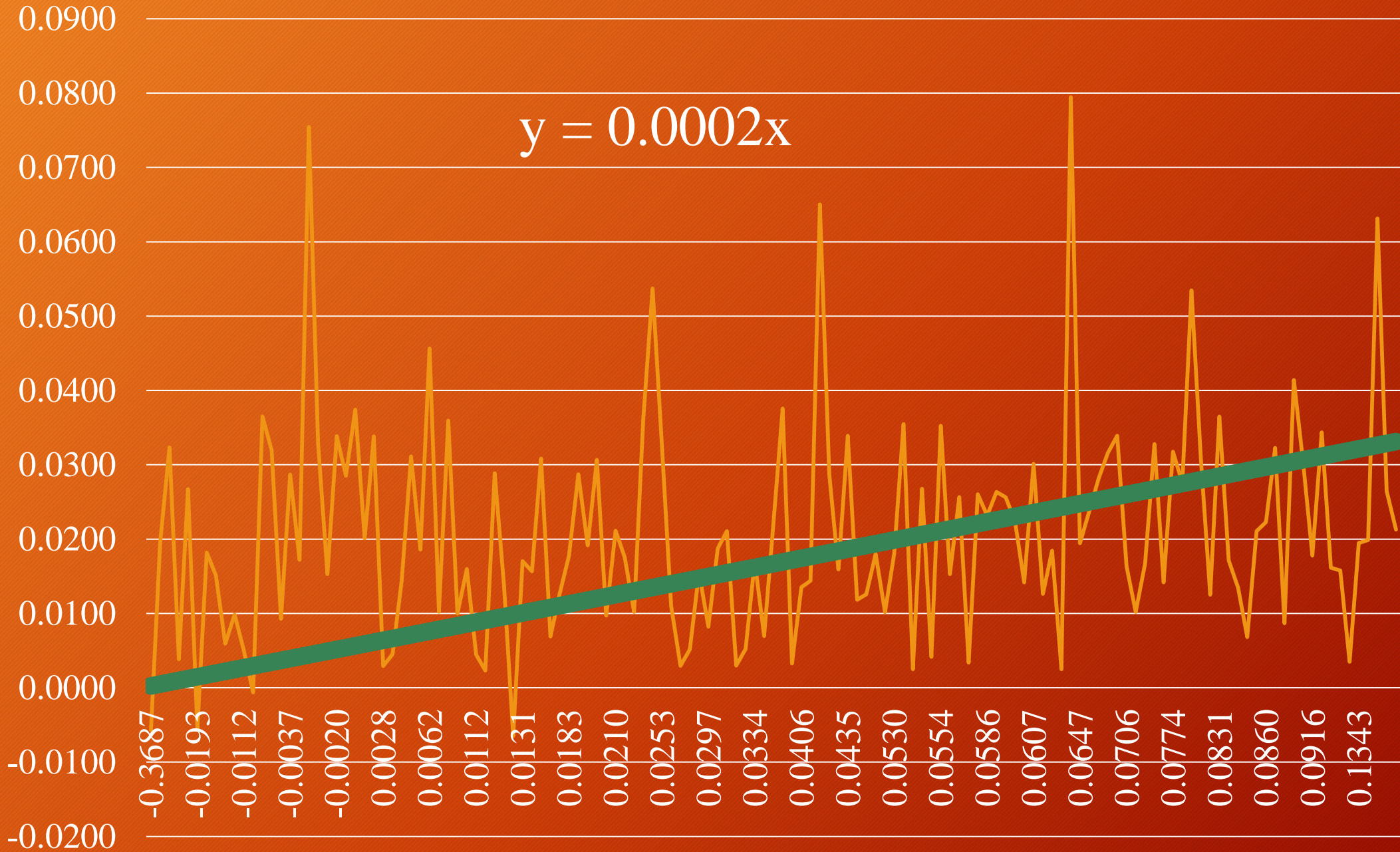
Money and Inflation



OIL



MS



Methodology

- Unit Root Tests
- Cointegration
- Johansen
- Vector Error Correction Mechanism

Unit Root Tests

| | ADF | Lags | PP | KPSS |
|----------------------|------------|-------------|-----------|-------------|
| CPI | 0.42 | 1 | 0.90 | 1.44* |
| ΔCPI | -3.21* | 3 | -7.84* | 0.18 |
| Money Supply | -0.05 | 1 | -0.89 | 1.45* |
| ΔMoney Supply | -13.55* | 1 | -14.85* | 0.05 |
| GDP | -1.54 | 1 | -1.06 | 1.38* |
| ΔGDP | -4.00* | 4 | -64.87* | 0.04 |
| Oil Prices | -0.39 | 1 | -0.72 | 0.86* |
| ΔOil Prices | -11.00* | 1 | -12.08* | 0.32 |

Results - Normalised

| Cointegrating Eq: | Estimates |
|-------------------|-----------|
| LCPI(-1) | 1.00 |
| LM2(-1) | -0.54* |
| | [-22.69] |
| LGDP(-1) | 0.24* |
| | [10.52] |
| LOP(-1) | -0.04 |
| | [-1.20] |

Vector Error Correction Results

| Error Correction: | D(LCPI) | D(LM2) | D(LGDP) | D(LOP) |
|-------------------|------------|-------------|--------------|------------|
| CointEq1 | -0.01 | 0.30 | -0.06 | 0.51 |
| | (0.01370) | (0.11088) | (0.02774) | (0.26935) |
| | [-0.68144] | [2.68214] | [-2.20314] | [1.91351] |

VAR

- CPI - Its own Lags
- M2 and GSP insignificant
- Oil Price - only first lag

Conclusion

Inflation is a monetary phenomenon and supply side shocks are mitigated by money supply in the long run, therefore the pass through effect of supply side shock to inflation remains for a short span.