Global Trade Analysis Project

# NTMs reductions in TPP countries

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# Overview of CP-TPP

- **What is CP-TPP?**
  - The CP-TPP(Comprehensive and Progressive Agreement for Trans-Pacific Partnership) is a proposed trade agreement between eleven Pacific Rim countries concerning a variety of matters of economic policy
  - Member countries: Brunei, Chile, New Zealand, Singapore, Australia, Canada, Japan, Malaysia, Mexico, Peru, and Vietnam
  - This agreement was reached on 30 December 2018 after 8 years of negotiations
  - Among other things, the CP-TPP seeks to lower trade barriers such as tariffs and non-tariff measures(NTMs)


TPP Trans-Pacific Partnership
Canada
~~United States~~
Japan
Mexico
Vietnam
Brunei
Malaysia
Singapore
Peru
Chile
Australia
New Zealand
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# Literature Review (1)

- **Petri and Plummer(2016) "The Economic Effects of the Trans-Pacific Partnership: New Estimates"**
  - Estimate TPP(Previous version of CP-TPP, includes the United State) will increase annual incomes in the United State by 0.5 percent of GDP
  - For non-TPP members, most of their real incomes will decrease because the higher trade barriers around the world

# Literature Review (2)

- **Petri and Plummer(2017) “Going It Alone in the Asia-Pacific: Regional Trade Agreements Without the United States”**
  - Without the United State in TPP, remaining members in TPP could generate benefits to members, albeit with gains only about one-third as large as those expected from the 12-member TPP
  - For the United States the implications are more negative. The United States would forego the benefits of participating deeply in the integration of a very dynamic region
  - High-quality agreements lead to substantially larger gains than less rigorous ones. For example, the CP-TPP agreement could produce more gains than RCEP, even though the CP-TPP economies have only one-third the GDP of the RCEP region
    - **CP-TPP has more tariff and NTMs reduction than RCEP**

# ABSTRACT

- **Reductions of NTMs, what are the differences between front-loading versus gradual changes?**
  - Front-loading leads to higher results overall (higher exports, higher GDP, among others) versus a gradual implementation of NTMs. Changes in NTMs take time, so  front-loading will lead  to over estimating the impact of a reduction in NTMs.

# Motivation

- **TPP countries: 11 countries that border the Pacific Ocean signed up to the TPP in Feb 2016 – roughly 40% of the world economic output and about 800 million in population (almost double the population of the EU’s single market).**
  - Does not include the USA nor China
- **TPP agreed to reduction in both the tariffs and the non-tariff barriers to trade**
  - Slashing tariffs and fostering trade to boost growth
- **NTMs reduction**
  - The attention has shifted partially to non-tariff measures due to the emergence of the deep free trade agreements

# Trade in 2018 between TPP countries

| | aus | brn | can | chl | jpn | mex | mys | nzl | per | sgp | vnm | Perc. exports TPP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| aus | 0 | 58 | 2279 | 591 | 45806 | 933 | 4641 | 7708 | 208 | 4371 | 2463 | 20% |
| brn | 1564 | 0 | 18 | 3 | 2904 | 4 | 49 | 332 | 1 | 138 | 34 | 46% |
| can | 3024 | 34 | 0 | 1473 | 14573 | 9277 | 1736 | 478 | 992 | 3892 | 604 | 7% |
| chl | 1017 | 3 | 1596 | 0 | 18481 | 2034 | 256 | 61 | 2072 | 285 | 389 | 19% |
| jpn | 20531 | 217 | 11326 | 3543 | 0 | 13371 | 20689 | 2206 | 1836 | 22451 | 11349 | 12% |
| mex | 1828 | 11 | 16863 | 3080 | 3441 | 0 | 418 | 158 | 2012 | 643 | 150 | 7% |
| mys | 9810 | 781 | 2774 | 300 | 20581 | 2926 | 0 | 1122 | 331 | 25336 | 4761 | 24% |
| nzl | 9927 | 15 | 650 | 90 | 3136 | 339 | 1001 | 0 | 112 | 817 | 525 | 34% |
| per | 179 | 2 | 4414 | 2421 | 4255 | 497 | 29 | 32 | 0 | 65 | 105 | 17% |
| sgp | 14688 | 590 | 3587 | 386 | 15339 | 1141 | 39269 | 2256 | 91 | 0 | 6645 | 26% |
| vnm | 3276 | 24 | 1597 | 238 | 11896 | 990 | 3210 | 245 | 159 | 2931 | 0 | 19% |
| Perc. imports TPP | 22% | 31% | 9% | 12% | 15% | 9% | 28% | 33% | 13% | 20% | 17% | |

New Zealand and Brunei export the largest share to other TPP countries, followed by Australia, Malaysia, Singapore, Vietnam, Chile, and Peru (about 20%). Canada, Mexico, and Japan export the smallest share to TPP

# Reductions in NTMs applied

- **Following Petri, Plummer and Zhai (2011)**
  - Non-tariff barriers are represented by tariff equivalents
  - Represent barriers that were applied to all trade partners prior to agreement
  - We assume elimination of 56.3% of NTBs in case of goods and 37.5% in the case of services

# Model and Data

- **Aggregation**
  - 15 regions (11 TPP countries, USA, CHINA, EU 27 and ROW)
  - 18 commodities
  - 5 activities
- **Period:**
  - 15 years (with schedule of tariff reductions overtime  and/or NTMs starting in 2019)
- **The baseline database used includes the NTMs (AlterTax) and tariffs**

# Shocks

- Include both tariff reductions and NTM reduction.

- Scenario 1: Tariff reductions + one-time NTM reduction shocks (front loading)

- Scenario 2: Tariff reductions + gradual NTM reduction shocks (over 10 years)

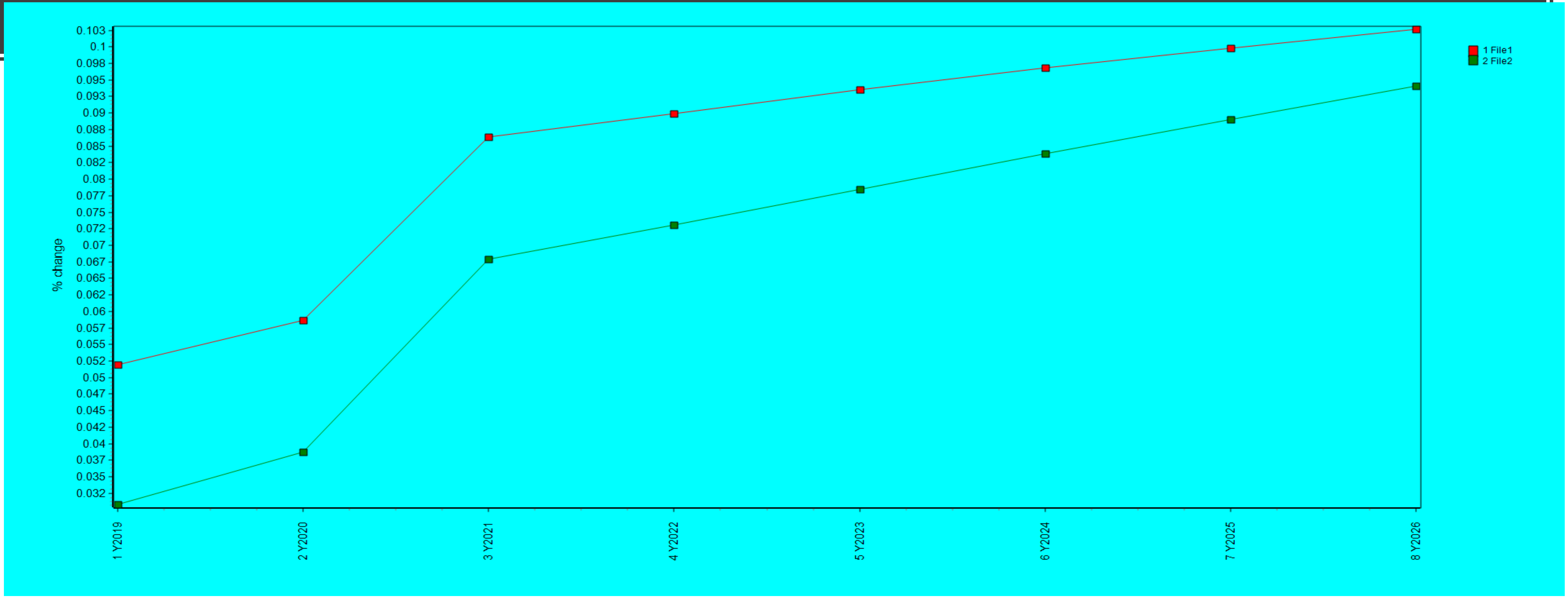
# Results Overview

- **Global results**
- **An example of TPP countries: Malaysia**
- **An example of non-TPP countries: China**

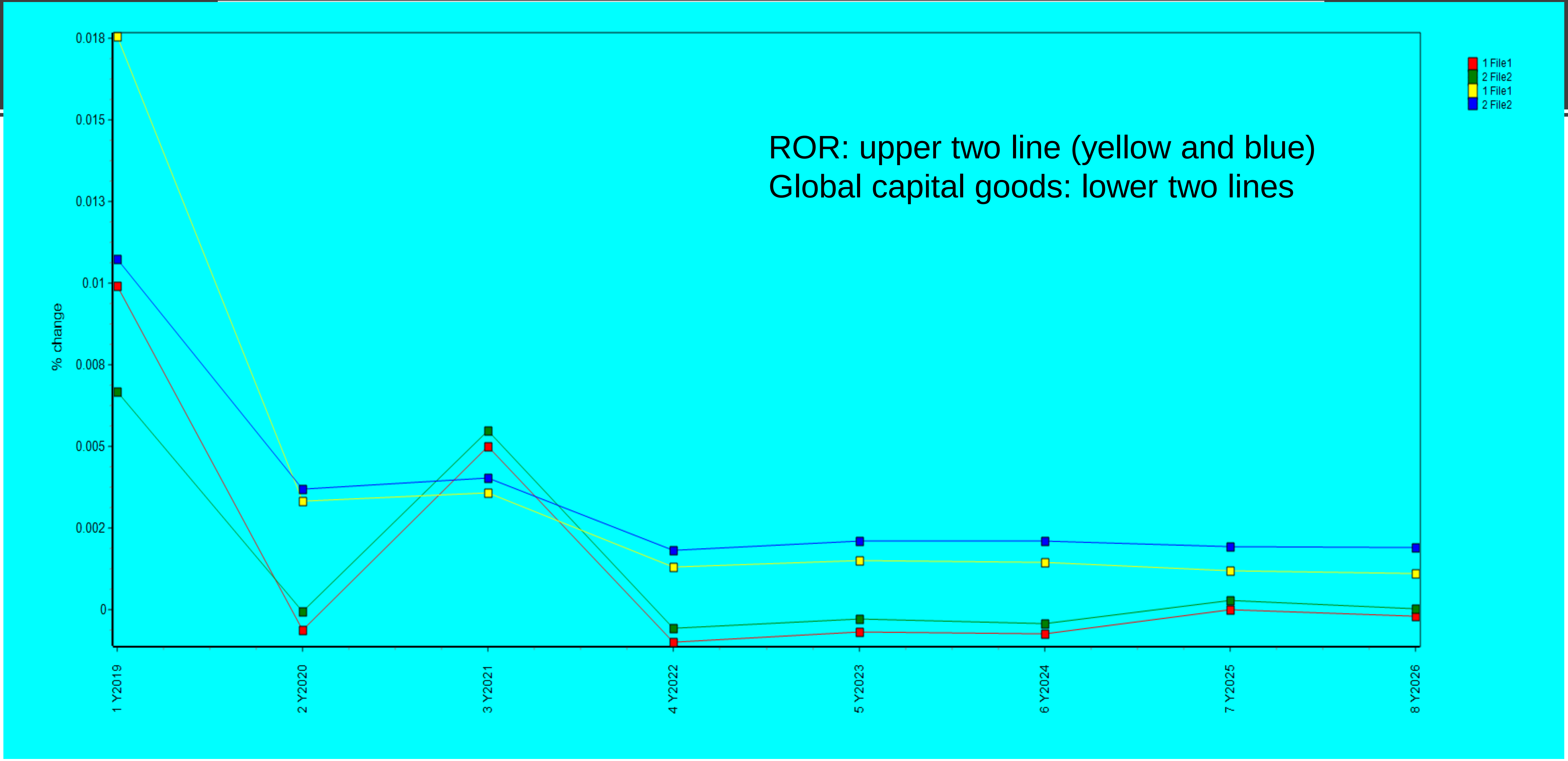
# Global Results: NTM Reduction (2019)

| NTMS | 1 AUS | 3 JPN | 4 BRN | 5 MYS | 6 SGP | 7 VNM | 9 CAN | 10 MEX | 12 NZL | 13 CHL | 14 PER |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 AUS | -2.71842 | -4.73333 | -3.32984 | -6.63796 | -6.91836 | -7.61258 | -3.3223 | -3.79524 | -2.23909 | -1.4904 | -4.5973 |
| 3 JPN | -2.11544 | -1.58716 | -2.94667 | -6.43607 | -8.12942 | -5.29378 | -5.17991 | -7.26303 | -1.59439 | -1.14688 | -4.81127 |
| 4 BRN | -1.86246 | -3.43338 | -2.48175 | -6.63892 | -8.65476 | -7.50869 | -4.47987 | -4.24835 | -2.2041 | -1.11716 | -6.62598 |
| 5 MYS | -1.28146 | -3.43581 | -4.02312 | -5.32132 | -7.61545 | -7.3803 | -3.82459 | -4.17594 | -1.69554 | -1.64181 | -5.84621 |
| 6 SGP | -5.15152 | -3.29302 | -5.7603 | -10.3564 | -5.31252 | -8.09649 | -6.74957 | -8.14079 | -2.94257 | -1.58927 | -5.91694 |
| 7 VNM | -1.94164 | -2.82197 | -3.54748 | -5.57278 | -9.08406 | -4.90358 | -3.5802 | -4.69824 | -2.25986 | -2.08001 | -4.71609 |
| 9 CAN | -3.01203 | -4.09064 | -4.77039 | -6.61585 | -11.7653 | -7.55709 | -1.84543 | -6.00008 | -2.8184 | -2.03894 | -5.55442 |
| 10 MEX | -0.87011 | -3.01258 | -2.74683 | -7.45458 | -8.95478 | -7.97133 | -1.45695 | -2.59567 | -0.58742 | -1.74544 | -2.90002 |
| 12 NZL | -1.70716 | -3.04798 | -3.56954 | -5.76437 | -8.13693 | -7.32511 | -3.27114 | -3.80721 | -1.07705 | -1.24403 | -4.73478 |
| 13 CHL | -1.47186 | -3.82 | -4.82173 | -10.3409 | -10.8017 | -9.8764 | -4.0351 | -5.93689 | -2.22831 | -1.89526 | -6.35608 |
| 14 PER | -0.77833 | -3.65941 | -3.33723 | -11.0789 | -10.2798 | -10.122 | -2.84385 | -6.78161 | -0.91384 | -1.09534 | -2.42117 |

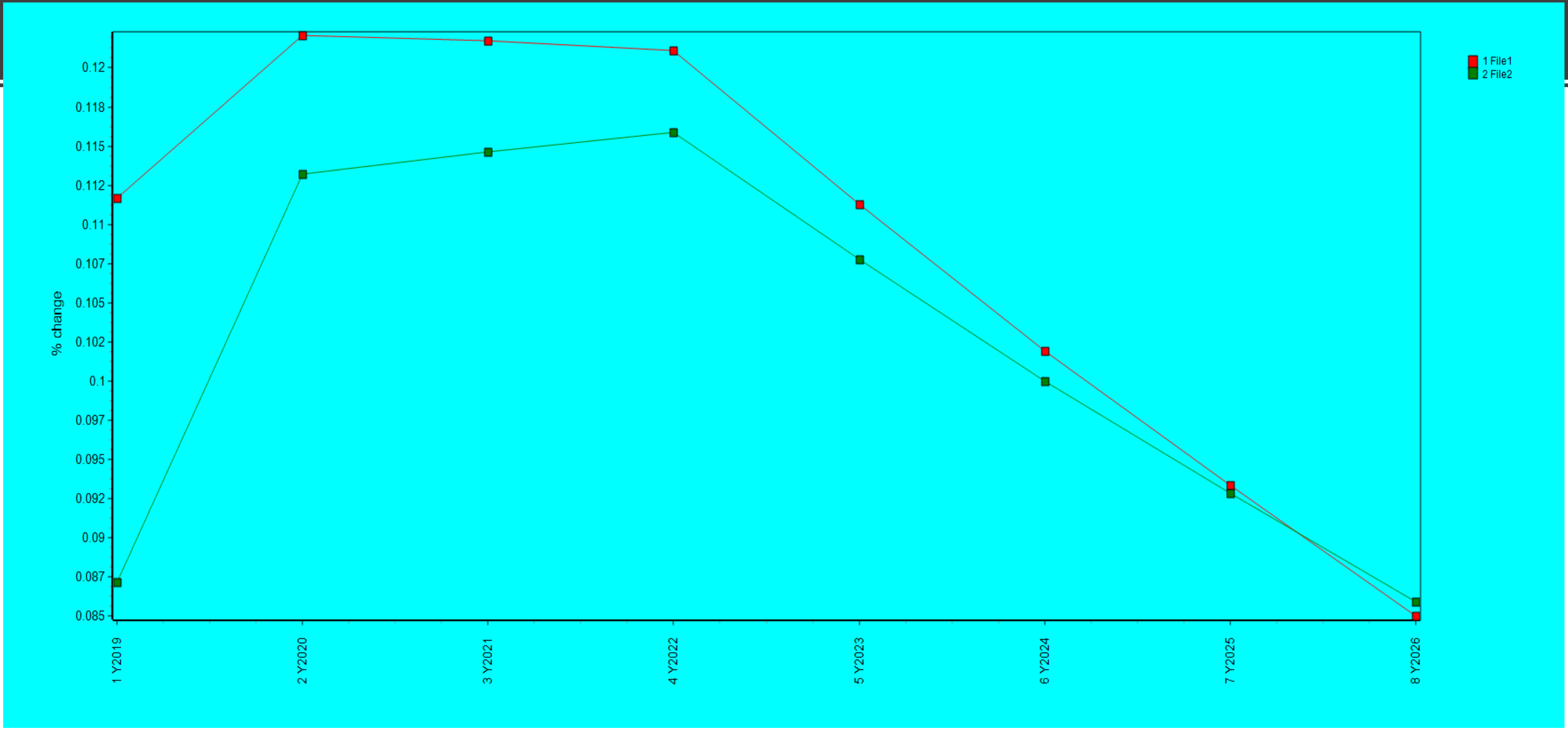
# Global Results: Exports (cumulative)



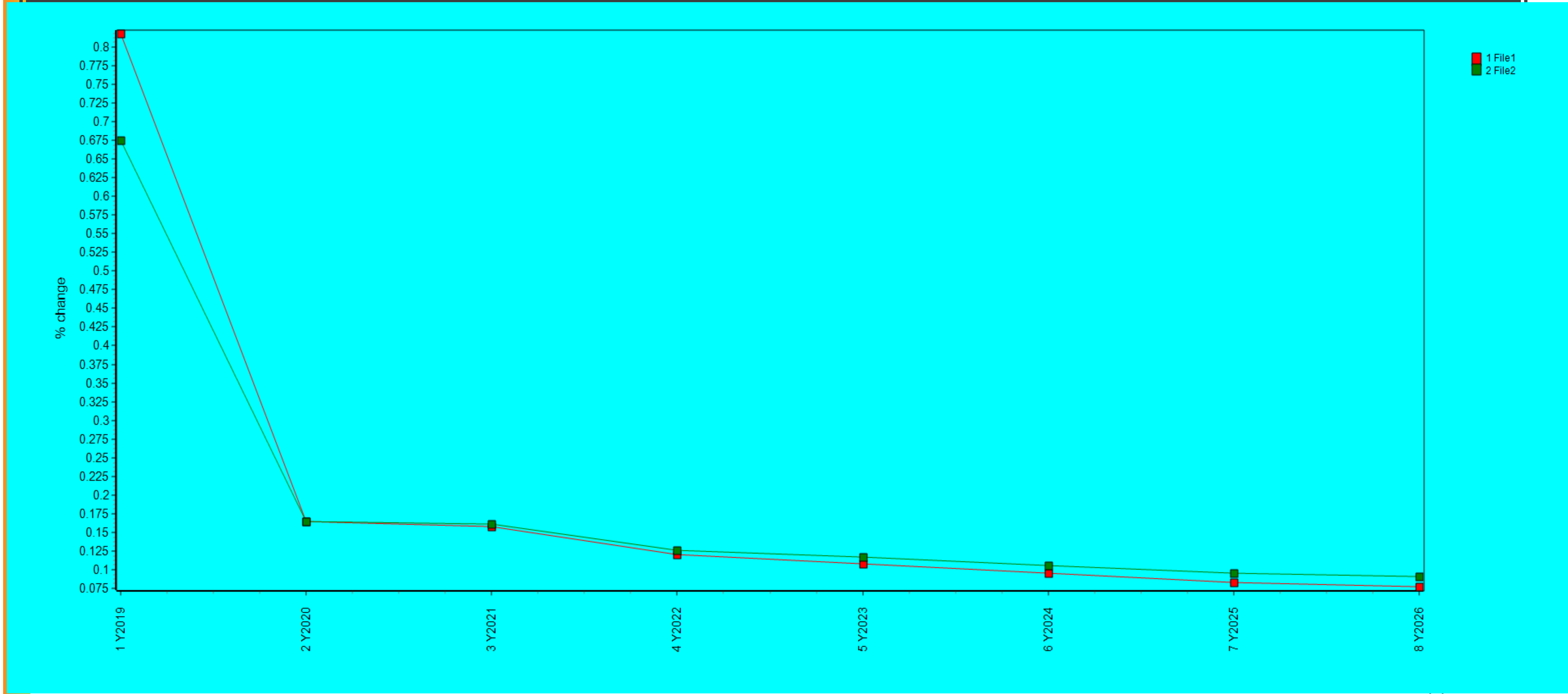
# Global Results: ROR and Global Capital Goods, Y-O-Y



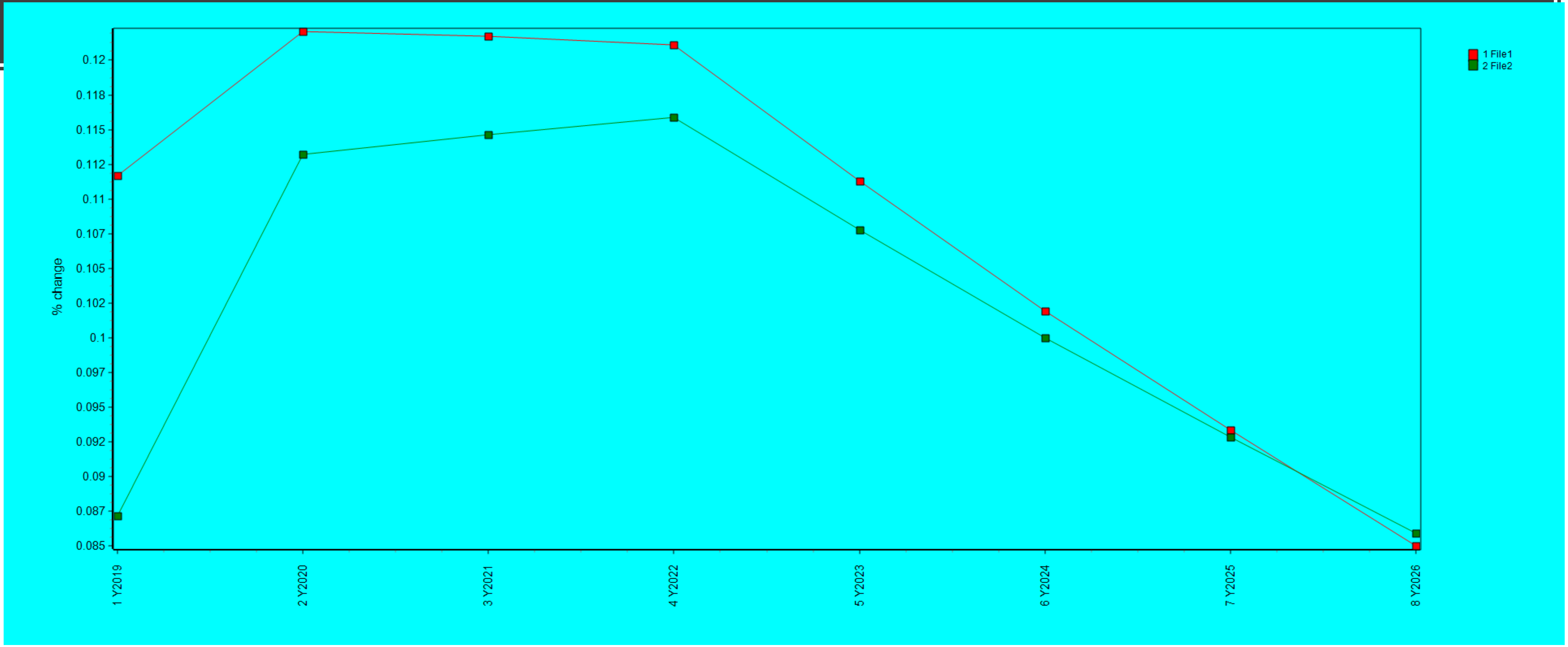
# TPP Country: Malaysia, GDP, Y-O-Y



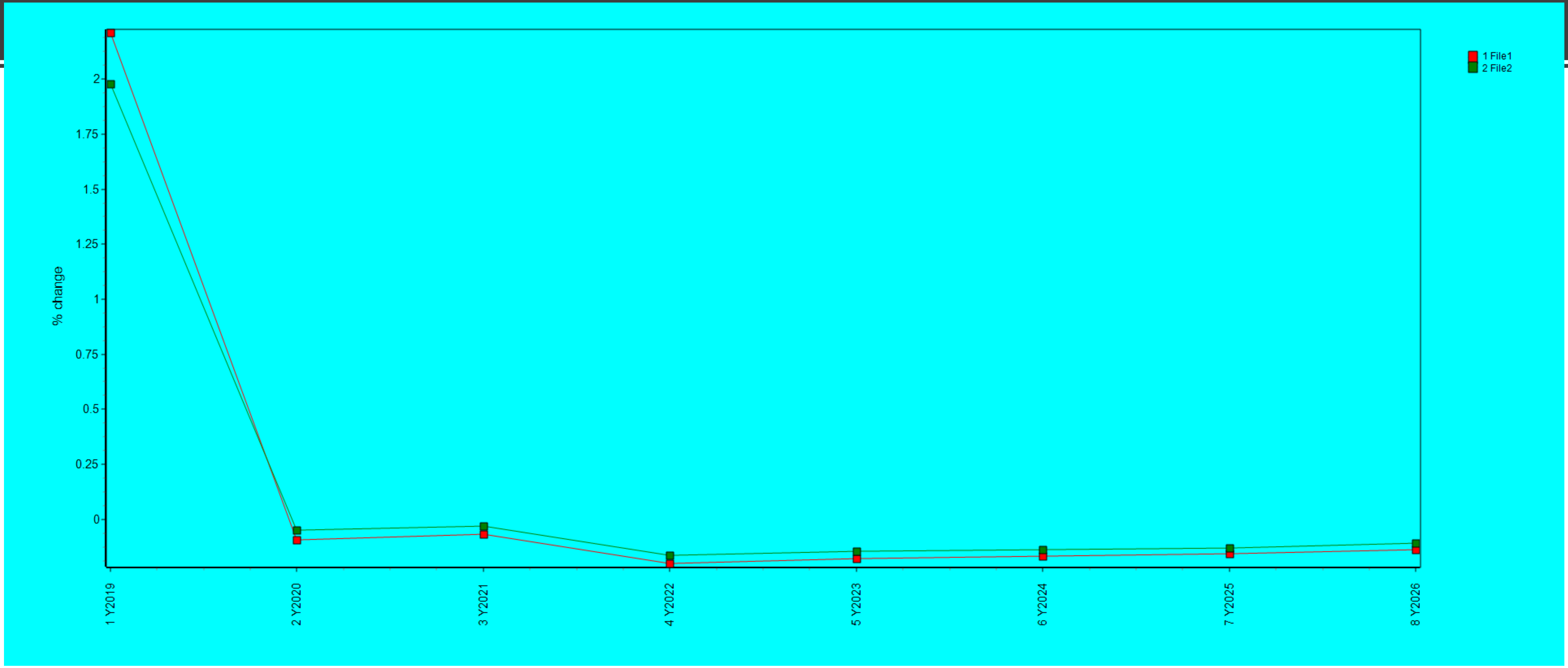
# TPP Country: Malaysia Exports, Y-O-Y



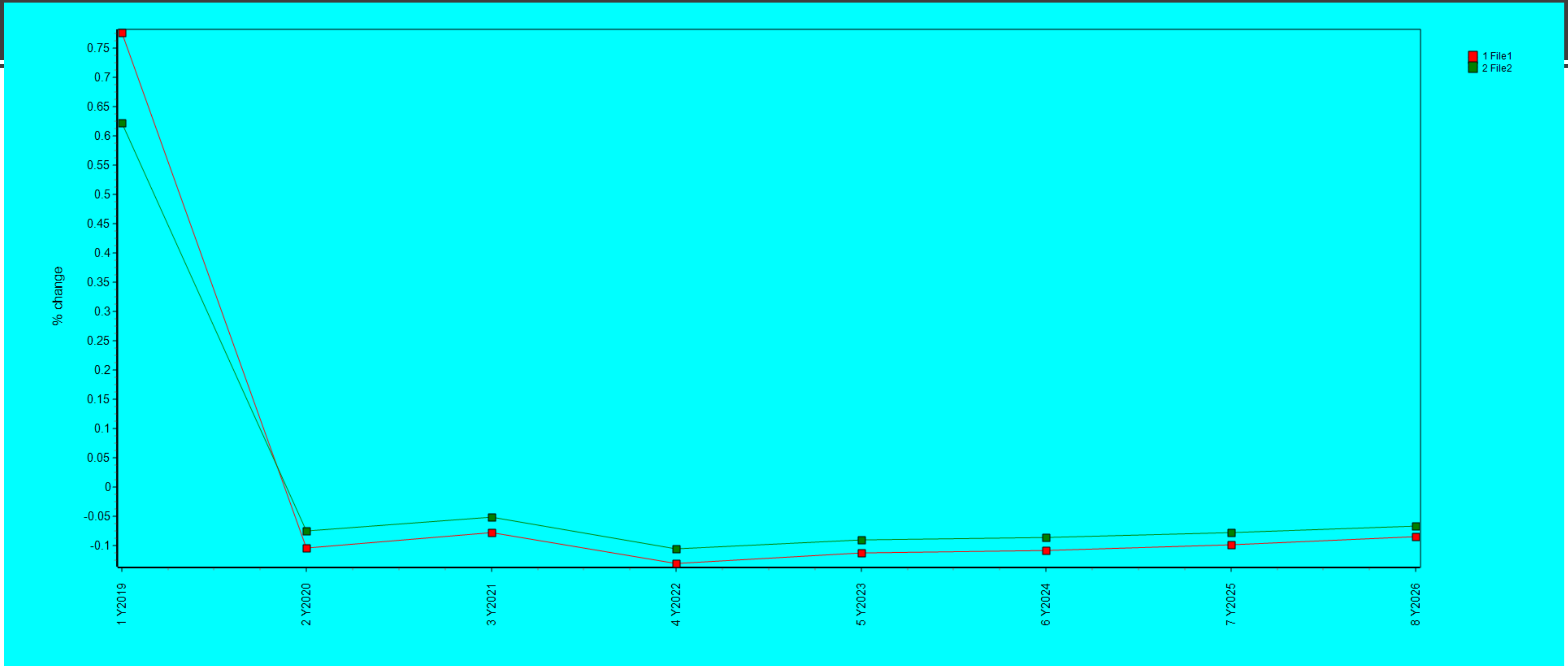
# TPP Country: Capital Investment, Malaysia, Y-O-Y



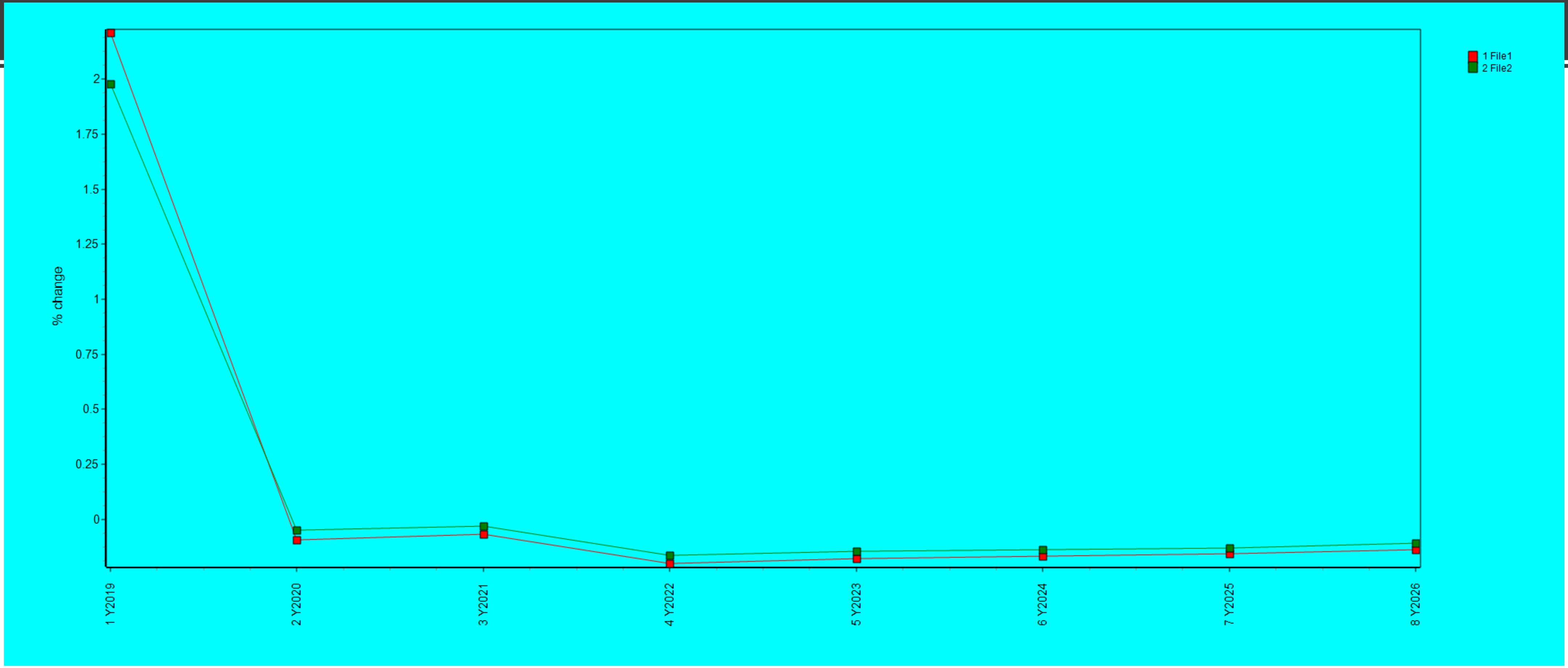
# TPP Country: Malaysia ROR, Y-O-Y



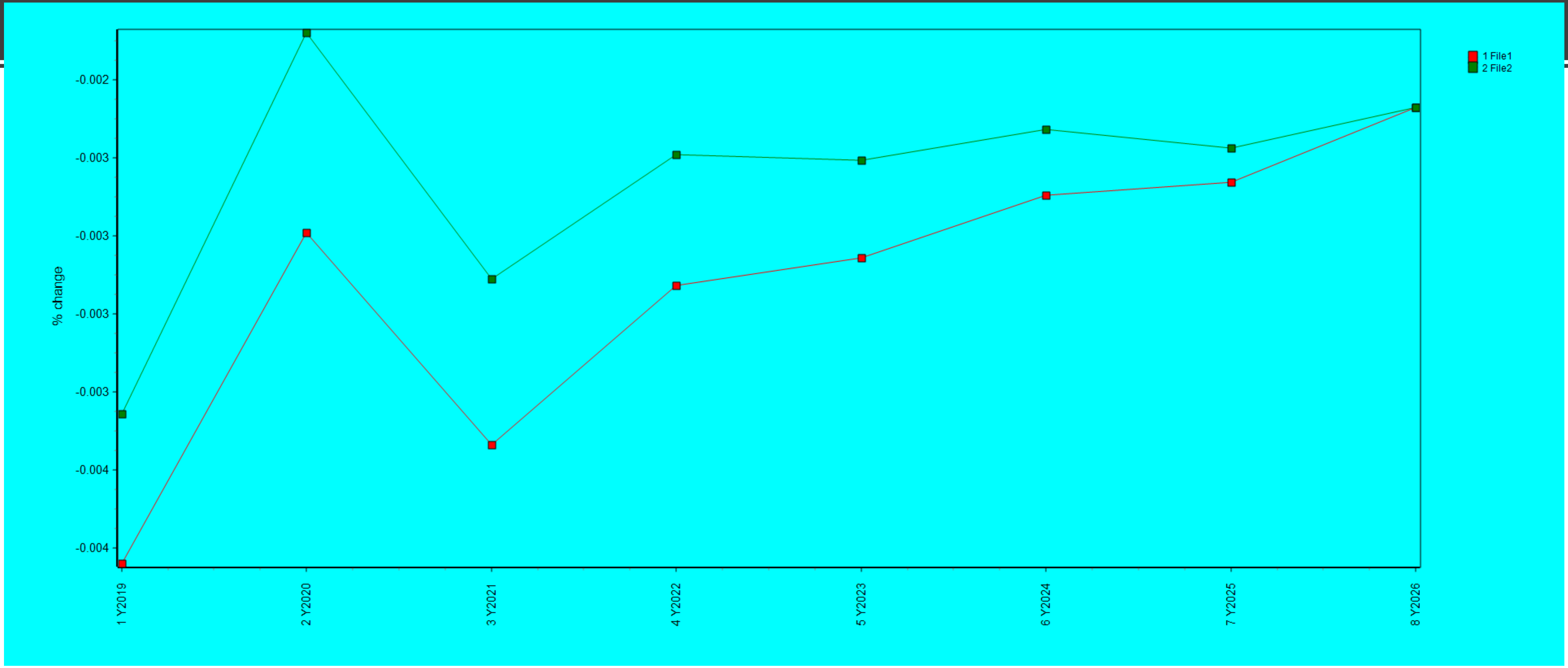
# TPP Country: Malaysia Capital Price, Y-O-Y



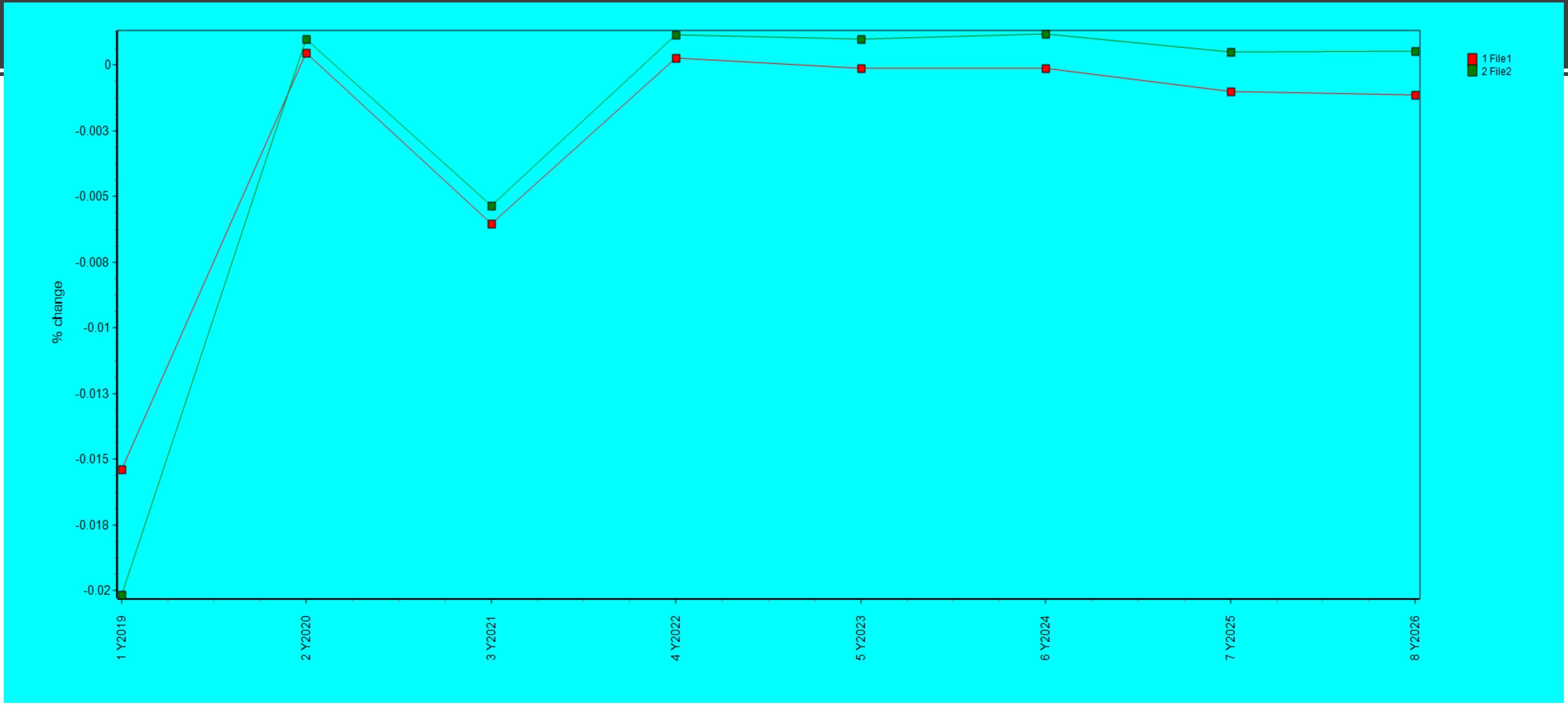
# TPP Country: Malaysia Unskilled labor Price, Y-O-Y



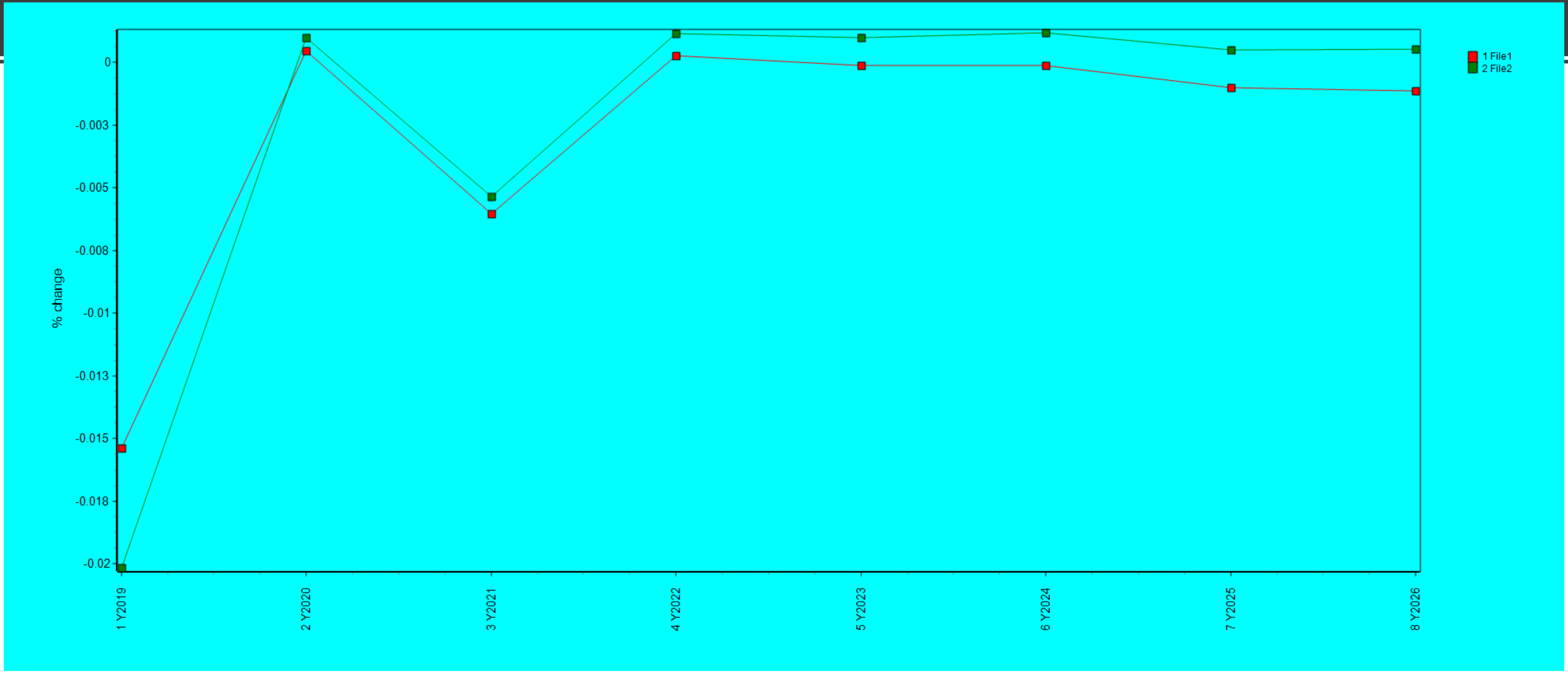
# Non-TPP: China GDP, Y-O-Y



# Non-TPP: China Exports



# Non-TPP: China Imports, Y-O-Y



# Conclusion

- The GDP growth in TPP countries is larger in one-time NTM reduction than the scenario with gradual NTM reduction in the first year(2019), especially in Malaysia.
- The cumulative effect converges eventually.
- Global exports increase and global ROR jumps initially.
- What drives labor price increase?
- China’s GDP and export growth initially decrease, but not go down deeper in the long run.