

per sektor

February 1, 2022

```
[386]: import pandas as pd
from sqlalchemy import create_engine
import mysql.connector as mysql
```

```
[387]: conn = create_engine("postgresql+pg8000://postgres:sgwi2341@localhost/
↳penerimaan")
```

```
[388]: db_conn = create_engine("mysql://sugengw07:sgwi2341@localhost/mpninfo")
```

```
[389]: kueri2020 = '''select s."Kategori" , sum(p.jml_setor) as Nominal_2020
from penerimaan_2020 p
full join mfwf m on (p.npwp_penyetor = m."FULL")
full join klu k
    on m."KODE_KLU" = k.klu_kode
full join sektor s
    on k.klu_sektor = s."Kode"
group by s."Kategori"
having sum(p.jml_setor) is not null
order by nominal_2020 desc ;'''
```

```
[390]: kueri2021 = '''select s."Kategori" , sum(p.jml_setor) as Nominal_2021
from penerimaan_2021 p
full join mfwf m on (p.npwp_penyetor = m."FULL")
full join klu k
    on m."KODE_KLU" = k.klu_kode
full join sektor s
    on k.klu_sektor = s."Kode"
group by s."Kategori"
having sum(p.jml_setor) is not null
order by Nominal_2021 desc ;'''
```

```
[391]: data_2020 = pd.read_sql(kueri2020,con=conn)
```

```
[392]: data_2020.head()
```

```
[392]:
```

	Kategori	nominal_2020
0	Perdagangan Besar dan Eceran; Reparasi dan Per...	4.318016e+12
1	Konstruksi	1.126487e+12

2	Pertambangan dan Penggalian	5.153084e+11
3	Industri Pengolahan	4.643365e+11
4	Jasa Keuangan dan Asuransi	4.043215e+11

```
[393]: data_2021 = pd.read_sql(kueri2021,con=conn)
```

```
[394]: data_2021.head()
```

```
[394]:
```

	Kategori	nominal_2021
0	Perdagangan Besar dan Eceran; Reparasi dan Per...	4.969486e+12
1	Konstruksi	1.066673e+12
2	Industri Pengolahan	3.980003e+11
3	Jasa Keuangan dan Asuransi	3.923831e+11
4	Pertambangan dan Penggalian	3.727682e+11

```
[395]: data = pd.
↳merge(data_2021,data_2020,left_on=['Kategori'],right_on=['Kategori'],how='outer')
```

```
[396]: data
```

```
[396]:
```

	Kategori	nominal_2021 \
0	Perdagangan Besar dan Eceran; Reparasi dan Per...	4.969486e+12
1	Konstruksi	1.066673e+12
2	Industri Pengolahan	3.980003e+11
3	Jasa Keuangan dan Asuransi	3.923831e+11
4	Pertambangan dan Penggalian	3.727682e+11
5	Informasi dan Komunikasi	3.073283e+11
6	Jasa Kesehatan dan Kegiatan Sosial	2.165394e+11
7	Real Estat	1.198587e+11
8	None	1.051512e+11
9	Penyediaan Akomodasi dan Penyediaan Makan Minum	5.990254e+10
10	Jasa Persewaan, Ketenagakerjaan, Agen Perjalanan...	5.107799e+10
11	Kegiatan Jasa Lainnya	4.804691e+10
12	Jasa Pendidikan	4.480162e+10
13	Pengadaan Listrik, Gas, Uap/Air Panas dan Udar...	2.162023e+10
14	Kebudayaan, Hiburan dan Rekreasi	1.547799e+10
15	Pengadaan Air, Pengelolaan Sampah dan Daur Ula...	5.695140e+09
16	Jasa Profesional, Ilmiah dan Teknis	3.980488e+09
17	Pertanian, Kehutanan dan Perikanan	1.404351e+09

	nominal_2020
0	4.318016e+12
1	1.126487e+12
2	4.643365e+11
3	4.043215e+11
4	5.153084e+11
5	2.873967e+11

```

6  1.230128e+11
7  1.448960e+11
8  9.446551e+10
9  5.505380e+10
10 5.698936e+10
11 3.912626e+10
12 3.900025e+10
13 3.294443e+10
14 1.522292e+10
15 7.479386e+09
16 -1.799760e+09
17 1.157118e+08

```

```

[397]: non_madtim_kueri = '''select
        s."Kategori",
        sum(n.nominal) as "Non WP Madtim"
from netto2021 n
left join mfwf_2020 m
    on n."FULL" = m."NPWP FULL"
left join klu k
    on m."Kode KLU" = k.klu_kode
left join sektor s
    on k.klu_sektor = s."Kode"
where n."NAMA_AR" = 'Non WP Madtim'
group by s."Kategori" ;'''

```

```

[398]: non_madtim = pd.read_sql(non_madtim_kueri,con=conn)

```

```

[399]: non_madtim.head()

```

```

[399]:

```

	Kategori	Non WP Madtim
0	Industri Pengolahan	8.465807e+11
1	Informasi dan Komunikasi	2.758244e+09
2	Jasa Kesehatan dan Kegiatan Sosial	1.378968e+09
3	Jasa Keuangan dan Asuransi	5.253688e+09
4	Jasa Persewaan, Ketenagakerjaan, Agen Perjalanan...	3.788507e+10

```

[400]: data = pd.
        ↳merge(data,non_madtim,left_on='Kategori',right_on='Kategori',how='outer')

```

```

[401]: data.fillna(0,inplace=True)

```

```

[402]: data.head()

```

```

[402]:

```

	Kategori	nominal_2021 \
0	Perdagangan Besar dan Eceran; Reparasi dan Per...	4.969486e+12
1	Konstruksi	1.066673e+12

2	Industri Pengolahan	3.980003e+11
3	Jasa Keuangan dan Asuransi	3.923831e+11
4	Pertambangan dan Penggalian	3.727682e+11

	nominal_2020	Non WP Madtim
0	4.318016e+12	8.070255e+11
1	1.126487e+12	5.551533e+10
2	4.643365e+11	8.465807e+11
3	4.043215e+11	5.253688e+09
4	5.153084e+11	0.000000e+00

```
[403]: data1 = data[data['nominal_2020']>0]
```

```
[404]: data2 = data[data['nominal_2020']<0]
```

```
[405]: data1['% Tumbuh'] = (data.nominal_2021-data.nominal_2020)/data.nominal_2020
data2['% Tumbuh'] = ''
```

```
<ipython-input-405-995ae21d4dee>:1: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead
```

```
See the caveats in the documentation: https://pandas.pydata.org/pandas-
docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
data1['% Tumbuh'] = (data.nominal_2021-data.nominal_2020)/data.nominal_2020
```

```
<ipython-input-405-995ae21d4dee>:2: SettingWithCopyWarning:
A value is trying to be set on a copy of a slice from a DataFrame.
Try using .loc[row_indexer,col_indexer] = value instead
```

```
See the caveats in the documentation: https://pandas.pydata.org/pandas-
docs/stable/user_guide/indexing.html#returning-a-view-versus-a-copy
data2['% Tumbuh'] = ''
```

```
[406]: data = data1.append(data2)
```

```
[407]: data
```

```
[407]:
```

	Kategori	nominal_2021 \
0	Perdagangan Besar dan Eceran; Reparasi dan Per...	4.969486e+12
1	Konstruksi	1.066673e+12
2	Industri Pengolahan	3.980003e+11
3	Jasa Keuangan dan Asuransi	3.923831e+11
4	Pertambangan dan Penggalian	3.727682e+11
5	Informasi dan Komunikasi	3.073283e+11
6	Jasa Kesehatan dan Kegiatan Sosial	2.165394e+11
7	Real Estat	1.198587e+11
8	0	1.051512e+11
9	Penyediaan Akomodasi dan Penyediaan Makan Minum	5.990254e+10

10	Jasa Persewaan, Ketenagakerjaan, Agen Perjalan...	5.107799e+10
11	Kegiatan Jasa Lainnya	4.804691e+10
12	Jasa Pendidikan	4.480162e+10
13	Pengadaan Listrik, Gas, Uap/Air Panas dan Udar...	2.162023e+10
14	Kebudayaan, Hiburan dan Rekreasi	1.547799e+10
15	Pengadaan Air, Pengelolaan Sampah dan Daur Ula...	5.695140e+09
17	Pertanian, Kehutanan dan Perikanan	1.404351e+09
16	Jasa Profesional, Ilmiah dan Teknis	3.980488e+09

	nominal_2020	Non WP	Madtim	% Tumbuh
0	4.318016e+12	8.070255e+11	0.150872	
1	1.126487e+12	5.551533e+10	-0.053097	
2	4.643365e+11	8.465807e+11	-0.142862	
3	4.043215e+11	5.253688e+09	-0.029527	
4	5.153084e+11	0.000000e+00	-0.276611	
5	2.873967e+11	2.758244e+09	0.069352	
6	1.230128e+11	1.378968e+09	0.760299	
7	1.448960e+11	1.227607e+10	-0.172795	
8	9.446551e+10	1.461455e+11	0.113117	
9	5.505380e+10	5.769055e+09	0.088073	
10	5.698936e+10	3.788507e+10	-0.103728	
11	3.912626e+10	0.000000e+00	0.227997	
12	3.900025e+10	0.000000e+00	0.148752	
13	3.294443e+10	5.837374e+09	-0.343736	
14	1.522292e+10	0.000000e+00	0.016756	
15	7.479386e+09	0.000000e+00	-0.238555	
17	1.157118e+08	0.000000e+00	11.13662	
16	-1.799760e+09	3.540043e+10		

```
[409]: data.to_excel(r'D:\DATA KANTOR\LAPORAN\2.2021_laporan_pajak_persektor.
↳xlsx',index=False)
```