OBJECTIVE CHECKS – PAYMENTS STATISTICS

DANMARKS NATIONALBANK

Version 1.0

Financial Stability

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Contents

Preface

Information on objective checks is presented in the text below. The checks are run on reports send to Danmarks Nationalbank as part of the statistical reporting to the Danish Payments Statistics

This cover note is a supplement to reporting guidelines intended for Banks, Nets and other reporters respectively. The guidelines presents an in depth explanation on information to be included in the different reporting forms. Forms are likewise presented in the guidelines.

The naming convention used respects the following structure, stated first row-number, the column-number. Thereby making 1.1/2.1 the cell where row 1.1 and column 2.1 intersects.

Row and column restrictions are respectively restrictions across rows and columns. Basic features of row-restrictions are, that row-number changes while the column-number is constant.

Form: KORTPI

Row-restrictions:
1.2/2.1 = 1.3/2.1 + 1.8/2.1
1.2/2.2 = 1.3/2.2 + 1.8/2.2
1.2/2.3 = 1.3/2.3 + 1.8/2.3
1.2/2.4 = 1.3/2.4 + 1.8/2.4
1.2/2.5 = 1.3/2.5 + 1.8/2.5
1.3/2.1 = 1.4/2.1 + 1.5/2.1 + 1.6/2.1 + 1.7/2.1
1.3/2.2 = 1.4/2.2 + 1.5/2.2 + 1.6/2.2 + 1.7/2.2
1.3/2.3 = 1.4/2.3 + 1.5/2.3 + 1.6/2.3 + 1.7/2.3
1.3/2.4 = 1.4/2.4 + 1.5/2.4 + 1.6/2.4 + 1.7/2.4
1.3/2.5 = 1.4/2.5 + 1.5/2.5 + 1.6/2.5 + 1.7/2.5
1.8/2.1 = 1.9/2.1 + 1.12/2.1
1.8/2.2 = 1.9/2.2 + 1.12/2.2
1.8/2.3 = 1.9/2.3 + 1.12/2.3
1.8/2.4 = 1.9/2.4 + 1.12/2.4
1.8/2.5 = 1.9/2.5 + 1.12/2.5

1.9/2.1 ≥ 1.10/2.1
1.9/2.1 ≥ 1.11/2.1
1.14/2.1 ≥ 1.15/2.1
1.14/2.2 ≥ 1.15/2.2
1.14/2.3 ≥ 1.15/2.3
1.14/2.6 ≥ 1.15/2.6
1.14/2.7 ≥ 1.15/2.7
1.14/2.8 ≥ 1.15/2.8
1.14/2.1 ≥ 1.16/2.1
1.14/2.2 ≥ 1.16/2.2
1.14/2.3 ≥ 1.16/2.3
1.14/2.6 ≥ 1.16/2.6
1.14/2.7 ≥ 1.16/2.7
1.14/2.8 ≥ 1.16/2.8
1.17/2.1 ≥ 1.18/2.1
1.17/2.2 ≥ 1.18/2.2
1.17/2.3 ≥ 1.18/2.3
1.17/2.4 ≥ 1.18/2.4
1.17/2.5 ≥ 1.18/2.5
1.17/2.8 ≥ 1.18/2.8
1.17/2.9 ≥ 1.18/2.9
1.17/2.10 ≥ 1.18/2.10
1.17/2.1 ≥ 1.19/2.1
1.17/2.2 ≥ 1.19/2.2

1.17/2.3 ≥ 1.19/2.3
1.17/2.4 ≥ 1.19/2.4
1.17/2.5 ≥ 1.19/2.5
1.17/2.9 ≥ 1.19/2.9
1.17/2.10 ≥ 1.19/2.10
Hvis 1.13/2.6 + 1.13/2.7 > 0 så 1.13/2.8 > 0
Hvis 1.14/2.6 + 1.14/2.7 > 0 så 1.14/2.8 > 0
Hvis 1.15/2.6 + 1.15/2.7 > 0 så 1.15/2.8 > 0
Hvis 1.16/2.6 + 1.16/2.7 > 0 så 1.16/2.8 > 0
Hvis 1.17/2.9 + 1.17/2. 10 > 0 så 1.17/2.8 > 0
Hvis 1.18/2.9 + 1.18/2. 10 > 0 så 1.18/2.8 > 0
Hvis 1.19/2.9 + 1.19/2.10 > 0 så 1.19/2.8 > 0

Column-restrictions
1.2/2.1 = 1.2/2.2 + 1.2/2.3
1.2/2.1 = 1.2/2.4 + 1.2/2.5
1.3/2.1 = 1.3/2.2 + 1.3/2.3
1.3/2.1 = 1.3/2.4 + 1.3/2.5
1.4/2.1 = 1.4/2.2 + 1.4/2.3
1.4/2.1 = 1.4/2.4 + 1.4/2.5
1.5/2.1 = 1.5/2.2 + 1.5/2.3
1.5/2.1 = 1.5/2.4 + 1.5/2.5
1.6/2.1 = 1.6/2.2 + 1.6/2.3
1.6/2.1 = 1.6/2.4 + 1.6/2.5
1.7/2.1 = 1.7/2.2 + 1.7/2.3
1.7/2.1 = 1.7/2.4 + 1.7/2.5
1.8/2.1 = 1.8/2.2 + 1.8/2.3
1.8/2.1 = 1.8/2.4 + 1.8/2.5
1.9/2.1 = 1.9/2.2 + 1.9/2.3
1.9/2.1 = 1.9/2.4 + 1.9/2.5
1.12/2.1 = 1.12/2.2 + 1.12/2.3
1.12/2.1 = 1.12/2.4 + 1.12/2.5
1.13/2.1 = 1.13/2.2 + 1.13/2.3
1.13/2.1 = 1.13/2.6 + 1.13/2.7
1.14/2.1 = 1.14/2.2 + 1.14/2.3
1.14/2.1 = 1.14/2.6 + 1.14/2.7
1.15/2.1 = 1.15/2.2 + 1.15/2.3
1.15/2.1 = 1.15/2.6 + 1.15/2.7
1.16/2.1 = 1.16/2.2 + 1.16/2.3
1.16/2.1 = 1.16/2.6 + 1.16/2.7
1.17/2.1 = 1.17/2.2 + 1.17/2.3

1.17/2.1 = 1.17/2.4 + 1.17/2.5
1.17/2.1 = 1.17/2.9 + 1.17/2.10
1.18/2.1 = 1.18/2.2 + 1.18/2.3
1.18/2.1 = 1.18/2.4 + 1.18/2.5
1.18/2.1 = 1.18/2.9 + 1.18/2.10
1.19/2.1 = 1.19/2.2 + 1.19/2.3
1.19/2.1 = 1.19/2.4 + 1.19/2.5
1.19/2.1 = 1.19/2.9 + 1.19/2.10

Form: ATM

Row-restrictions
1.1/2.1 ≥ 1.2/2.1
1.1/2.1 ≥ 1.3/2.1
1.1/2.1 ≥ 1.4/2.1

Column-restrictions
None.

Form: HIPIa and HIPIb

Row-restrictions
1.1/2.1 = 1.2/2.1 + 1.3/2.1
1.1/2.2 = 1.2/2.2 + 1.3/2.2
1.1/2.3 = 1.2/2.3 + 1.3/2.3
1.4/2.1 = 1.5/2.1 + 1.6/2.1 + 1.7/2.1
1.4/2.2 = 1.5/2.2 + 1.6/2.2 + 1.7/2.2
1.4/2.3 = 1.7/2.3

Column-restrictions
1.1/2.1 = 1.1/2.2 + 1.1/2.3
1.2/2.1 = 1.2/2.2 + 1.2/2.3
1.3/2.1 = 1.3/2.2 + 1.3/2.3
1.4/2.1 = 1.4/2.2 + 1.4/2.3
1.5/2.1 = 1.5/2.2
1.6/2.1 = 1.6/2.2
1.7/2.1 = 1.7/2.2 + 1.7/2.3

Form: TKORTPIa and TKORTPIb

Row-restrictions

1.2/2.1 = 1.3/2.1 + 1.8/2.1
1.2/2.2 = 1.3/2.2 + 1.8/2.2
1.2/2.3 = 1.3/2.3 + 1.8/2.3
1.2/2.4 = 1.3/2.4 + 1.8/2.4
1.2/2.5 = 1.3/2.5 + 1.8/2.5
1.2/2.6 = 1.3/2.6 + 1.8/2.6
1.2/2.7 = 1.3/2.7 + 1.8/2.7
1.2/2.8 = 1.3/2.8 + 1.8/2.8
1.2/2.9 = 1.3/2.9 + 1.8/2.9
1.2/2.10 = 1.3/2.10 + 1.8/2.10
1.2/2.11 = 1.3/2.11 + 1.8/2.11
1.2/2.12 = 1.3/2.12 + 1.8/2.12
1.2/2.13 = 1.3/2.13 + 1.8/2.13
1.3/2.1 = 1.4/2.1 + 1.5/2.1 + 1.6/2.1 + 1.7/2.1
1.3/2.2 = 1.4/2.2 + 1.5/2.2 + 1.6/2.2 + 1.7/2.2
1.3/2.3 = 1.4/2.3 + 1.5/2.3 + 1.6/2.3 + 1.7/2.3
1.3/2.4 = 1.4/2.4 + 1.5/2.4 + 1.6/2.4 + 1.7/2.4
1.3/2.5 = 1.4/2.5 + 1.5/2.5 + 1.6/2.5 + 1.7/2.5
1.3/2.6 = 1.4/2.6 + 1.5/2.6 + 1.6/2.6 + 1.7/2.6
1.3/2.7 = 1.4/2.7 + 1.5/2.7 + 1.6/2.7 + 1.7/2.7
1.3/2.8 = 1.4/2.8 + 1.5/2.8 + 1.6/2.8 + 1.7/2.8
1.3/2.9 = 1.5/2.9 + 1.6/2.9 + 1.7/2.9
1.3/2.10 = 1.5/2.10 + 1.6/2.10 + 1.7/2.10
1.3/2.11 = 1.5/2.11 + 1.6/2.11 + 1.7/2.11
1.3/2.12 = 1.4/2.12 + 1.5/2.12 + 1.6/2.12 + 1.7/2.12
1.3/2.13 = 1.4/2.13 + 1.5/2.13 + 1.6/2.13 + 1.7/2.13
1.8/2.1 = 1.9/2.1 + 1.12/2.1
1.8/2.2 = 1.9/2.2 + 1.12/2.2
1.8/2.3 = 1.9/2.3 + 1.12/2.3
1.8/2.4 = 1.9/2.4 + 1.12/2.4
1.8/2.5 = 1.9/2.5 + 1.12/2.5
1.8/2.6 = 1.9/2.6 + 1.12/2.6
1.8/2.7 = 1.9/2.7 + 1.12/2.7
1.8/2.8 = 1.9/2.8 + 1.12/2.8
1.8/2.9 = 1.9/2.9
1.8/2.10 = 1.9/2.10
1.8/2.11 = 1.9/2.11
1.8/2.12 = 1.9/2.12 + 1.12/2.12
1.8/2.13 = 1.9/2.13 + 1.12/2.13

1.9/2.1 ≥ 1.10/2.1
1.9/2.1 ≥ 1.11/2.1
1.14/2.1 ≥ 1.15/2.1
1.14/2.1 ≥ 1.16/2.1
1.17/2.1 ≥ 1.18/2.1
1.17/2.12 ≥ 1.18/2.12
1.17/2.13 ≥ 1.18/2.13
1.17/2.14 ≥ 1.18/2.14
1.17/2.15 ≥ 1.18/2.15
1.17/2.1 ≥ 1.19/2.1
1.17/2.12 ≥ 1.19/2.12
1.17/2.13 ≥ 1.19/2.13
1.17/2.14 ≥ 1.19/2.14
1.17/2.15 ≥ 1.19/2.15

Column-restrictions
1.1/2.1 = 1.1/2.5
1.2/2.1 = 1.2/2.2+ 1.2/2.3 + 1.2/2.4 + 1.2/2.5 + 1.2/2.9 + 1.2/2.10 + 1.2/2.11
1.2/2.7 = 1.2/2.2 + 1.2/2.4 - 1.2/2.8
1.2/2.8 = 1.2/2.2 + 1.2/2.4 - 1.2/2.7
1.2/2.1 = 1.2/2.12 + 1.2/2.13
1.3/2.1 = 1.3/2.2+ 1.3/2.3 + 1.3/2.4 + 1.3/2.5 + 1.3/2.9 + 1.3/2.10 + 1.3/2.11
1.3/2.7 = 1.3/2.2 + 1.3/2.4 - 1.3/2.8
1.3/2.8 = 1.3/2.2 + 1.3/2.4 - 1.3/2.7
1.3/2.1 = 1.3/2.12 + 1.3/2.13
1.4/2.1 = 1.4/2.2 + 1.4/2.3 + 1.4/2.4 + 1.4/2.5
1.4/2.7 = 1.4/2.2 + 1.4/2.4 - 1.4/2.8
1.4/2.8 = 1.4/2.2 + 1.4/2.4 - 1.4/2.7
1.4/2.1 = 1.4/2.12 + 1.4/2.13
1.5/2.1 = 1.5/2.2 + 1.5/2.3 + 1.5/2.4 + 1.5/2.5 + 1.5/2.9 + 1.5/2.10 + 1.5/2.11
1.5/2.7 = 1.5/2.2 + 1.5/2.4 - 1.5/2.8
1.5/2.8 = 1.5/2.2 + 1.5/2.4 - 1.5/2.7
1.5/2.1 = 1.5/2.12 + 1.5/2.13
1.6/2.1 = 1.6/2.2 + 1.6/2.3 + 1.6/2.4 + 1.6/2.5 + 1.6/2.9 + 1.6/2.10 + 1.6/2.11
1.6/2.7 = 1.6/2.2 + 1.6/2.4 - 1.6/2.8
1.6/2.8 = 1.6/2.2 + 1.6/2.4 - 1.6/2.7
1.6/2.1 = 1.6/2.12 + 1.6/2.13
1.7/2.1 = 1.7/2.2 + 1.7/2.3 + 1.7/2.4 + 1.7/2.5 + 1.7/2.9 + 1.7/2.10 + 1.7/2.11
1.7/2.7 = 1.7/2.2 + 1.7/2.4 - 1.7/2.8
1.7/2.8 = 1.7/2.2 + 1.7/2.4 - 1.7/2.7
1.7/2.1 = 1.7/2.12 + 1.7/2.13
1.8/2.1 = 1.8/2.2 + 1.8/2.3 + 1.8/2.4 + 1.8/2.5 + 1.8/2.9 + 1.8/2.10 + 1.8/2.11

1.8/2.7 = 1.8/2.2 + 1.8/2.4 - 1.8/2.8
1.8/2.8 = 1.8/2.2 + 1.8/2.4 - 1.8/2.7
1.8/2.1 = 1.8/2.12 + 1.8/2.13
1.9/2.1 = 1.9/2.2 + 1.9/2.3 + 1.9/2.4 + 1.9/2.5 + 1.9/2.9 + 1.9/2.10 + 1.9/2.11
1.9/2.7 = 1.9/2.2 + 1.9/2.4 - 1.9/2.8
1.9/2.8 = 1.9/2.2 + 1.9/2.4 - 1.9/2.7
1.9/2.1 = 1.9/2.12 + 1.9/2.13
1.12/2.1 = 1.12/2.2 + 1.12/2.3 + 1.12/2.4 + 1.12/2.5
1.12/2.7 = 1.12/2.2 + 1.12/2.4 - 1.12/2.8
1.12/2.8 = 1.12/2.2 + 1.12/2.4 - 1.12/2.7
1.12/2.1 = 1.12/2.12 + 1.12/2.13
1.13/2.1 = 1.13/2.2 + 1.13/2.3 + 1.13/2.4 + 1.13/2.5
1.13/2.7 = 1.13/2.2 + 1.13/2.4 - 1.13/2.8
1.13/2.8 = 1.13/2.2 + 1.13/2.4 - 1.13/2.7
1.17/2.1 = 1.17/2.12 + 1.17/2.13
1.17/2.1 = 1.17/2.14 + 1.17/2.15
1.18/2.1 = 1.18/2.12 + 1.18/2.13
1.18/2.1 = 1.18/2.14 + 1.18/2.15
1.19/2.1 = 1.19/2.12 + 1.19/2.13
1.19/2.1 = 1.19/2.14 + 1.19/2.15

1.2/2.6 ≤ 1.2/2.2 + 1.2/2.4
1.3/2.6 ≤ 1.3/2.2 + 1.3/2.4
1.4/2.6 ≤ 1.4/2.2 + 1.4/2.4
1.5/2.6 ≤ 1.5/2.2 + 1.5/2.4
1.6/2.6 ≤ 1.6/2.2 + 1.6/2.4
1.7/2.6 ≤ 1.7/2.2 + 1.7/2.4
1.8/2.6 ≤ 1.8/2.2 + 1.8/2.4
1.9/2.6 ≤ 1.9/2.2 + 1.9/2.4
1.12/2.6 ≤ 1.12/2.2 + 1.12/2.4
1.13/2.6 ≤ 1.13/2.2 + 1.13/2.4

Form: TUKORTa and TUKORTb

Row-restrictions
1.1/2.1 = 1.2/2.1 + 1.3/2.1
1.1/2.2 = 1.2/2.2 + 1.3/2.2
1.1/2.3 = 1.2/2.3 + 1.3/2.3
1.1/2.4 = 1.2/2.4 + 1.3/2.4
1.1/2.5 = 1.2/2.5 + 1.3/2.5

Column-restrictions
1.1/2.1 = 1.1/2.2 + 1.1/2.3 + 1.1/2.4 + 1.1/2.5
1.2/2.1 = 1.2/2.2 + 1.2/2.3 + 1.2/2.4 + 1.2/2.5
1.3/2.1 = 1.3/2.2 + 1.3/2.3 + 1.3/2.4 + 1.3/2.5

Form: TMOBILa and TMOBILb

Row-restrictions
None.

Column-restrictions
It is not possible to have automatic objective checks across the different underlying services on which information is reported.

MobilePay:
1.1/2.1 = 1.1/2.2
1.1/2.2 = 1.1/2.3 + 1.1/2.4 + 1.1/2.5 + 1.1/2.6

Wireless card payments using wallets and other apps process through the normal infrastructure for card payments:
1.1/2.1 = 1.1/2.3 + 1.1/2.4 + 1.2/2.5 + 1.1/2.5 + 1.2/2.6*
*In case P2P-transfers become possible.

Form: TKOa and TKOb

Row-restrictions
1.1/2.1 = 1.2/2.1 + 1.5/2.1
1.1/2.2 = 1.2/2.2 + 1.5/2.2
1.1/2.3 = 1.2/2.3 + 1.5/2.3
1.1/2.4 = 1.2/2.4 + 1.5/2.4
1.1/2.5 = 1.2/2.5 + 1.5/2.5
1.1/2.6 = 1.2/2.6 + 1.5/2.6
1.1/2.7 = 1.2/2.7 + 1.5/2.7
1.1/2.8 = 1.2/2.8 + 1.5/2.8
1.1/2.9 = 1.2/2.9 + 1.5/2.9
1.1/2.10 = 1.2/2.10 + 1.5/2.10
1.1/2.11 = 1.2/2.11 + 1.5/2.11
1.1/2.12 = 1.2/2.12 + 1.5/2.12
1.2/2.1 = 1.3/2.1 + 1.4/2.1
1.2/2.2 = 1.3/2.2 + 1.4/2.2
1.2/2.3 = 1.3/2.3
1.2/2.4 = 1.3/2.4 + 1.4/2.4
1.2/2.5 = 1.3/2.5 + 1.4/2.5
1.2/2.6 = 1.3/2.6 + 1.4/2.6
1.2/2.7 = 1.3/2.7
1.2/2.8 = 1.3/2.8
1.2/2.9 = 1.3/2.9
1.2/2.10 = 1.3/2.10
1.2/2.11 = 1.3/2.11 + 1.4/2.11
1.2/2.12 = 1.3/2.12 + 1.4/2.12
1.5/2.1 = 1.6/2.1 + 1.12/2.1
1.5/2.2 = 1.6/2.2 + 1.12/2.2
1.5/2.3 = 1.6/2.3
1.5/2.4 = 1.6/2.4 + 1.12/2.4
1.5/2.5 = 1.6/2.5 + 1.12/2.5
1.5/2.6 = 1.6/2.6 + 1.12/2.6
1.5/2.7 = 1.6/2.7
1.5/2.8 = 1.6/2.8
1.5/2.9 = 1.6/2.9
1.5/2.10 = 1.6/2.10
1.5/2.11 = 1.6/2.11 + 1.12/2.11
1.5/2.12 = 1.6/2.12 + 1.12/2.12
1.6/2.1 ≥ 1.7/2.1 + 1.8/2.1 + 1.9/2.1 + 1.10/2.1 + 1.11/2.1
1.12/2.1 ≥ 1.13/2.1 + 1.14/2.1 + 1.15/2.1 + 1.16/2.1

Column-restrictions

1.1/2.1 = 1.1/2.2 + 1.1/2.3 + 1.1/2.4 + 1.1/2.5 + 1.1/2.6 + 1.1/2.7 + 1.1/2.8 + 1.1/2.9 + 1.1/2.10

1.1/2.1 = 1.1/2.11 + 1.1/2.12

1.2/2.1 = 1.2/2.2 + 1.2/2.3 + 1.2/2.4 + 1.2/2.5 + 1.2/2.6 + 1.2/2.7 + 1.2/2.8 + 1.2/2.9 + 1.2/2.10

1.2/2.1 = 1.2/2.11 + 1.2/2.12

1.3/2.1 = 1.3/2.2 + 1.3/2.3 + 1.3/2.4 + 1.3/2.5 + 1.3/2.6 + 1.3/2.7 + 1.3/2.8 + 1.3/2.9 + 1.3/2.10

1.3/2.1 = 1.3/2.11 + 1.3/2.12

1.4/2.1 = 1.4/2.2 + 1.4/2.4 + 1.4/2.5 + 1.4/2.6

1.4/2.1 = 1.4/2.11 + 1.4/2.12

1.5/2.1 = 1.5/2.2 + 1.5/2.3 + 1.5/2.4 + 1.5/2.5 + 1.5/2.6 + 1.5/2.7 + 1.5/2.8 + 1.5/2.9 + 1.5/2.10

1.5/2.1 = 1.5/2.11 + 1.5/2.12

1.6/2.1 = 1.6/2.2 + 1.6/2.3 + 1.6/2.4 + 1.6/2.5 + 1.6/2.6 + 1.6/2.7 + 1.6/2.8 + 1.6/2.9 + 1.6/2.10

1.6/2.1 = 1.6/2.11 + 1.6/2.12

1.12/2.1 = 1.12/2.2 + 1.12/2.4 + 1.12/2.5 + 1.12/2.6

1.12/2.1 = 1.12/2.11 + 1.12/2.12

Form: TUKOa and TUKOb

Row-restrictions

None.

Column-restrictions

1.1/2.1 = 1.1/2.2 + 1.1/2.3 + 1.1/2.4 + 1.1/2.5 + 1.1/2.6

1.1/2.1 = 1.1/2.7 + 1.1/2.8

1.2/2.1 = 1.2/2.2 + 1.2/2.3 + 1.2/2.4 + 1.2/2.5 + 1.2/2.6

1.2/2.1 = 1.2/2.7 + 1.2/2.8

Form: TDDPIa and TDDPIb

Row-restrictions

1.1/2.1 = 1.2/2.1 + 1.6/2.1
1.1/2.2 = 1.2/2.2 + 1.6/2.2
1.1/2.3 = 1.2/2.3 + 1.6/2.3
1.2/2.1 = 1.3/2.1 + 1.4/2.1 + 1.5/2.1
1.2/2.2 = 1.3/2.2 + 1.4/2.2
1.2/2.3 = 1.3/2.3 + 1.5/2.3
1.6/2.1 = 1.7/2.1 + 1.8/2.1
1.6/2.2 = 1.7/2.2
1.6/2.3 = 1.8/2.3
1.6/2.4 = 1.7/2.4 + 1.8/2.4

Column-restrictions

1.1/2.1 = 1.1/2.2 + 1.1/2.3
1.2/2.1 = 1.2/2.2 + 1.2/2.3
1.3/2.1 = 1.3/2.2 + 1.3/2.3
1.4/2.1 = 1.4/2.2
1.5/2.1 = 1.5/2.3
1.6/2.1 = 1.6/2.2 + 1.6/2.3
1.7/2.1 = 1.7/2.2
1.8/2.1 = 1.8/2.3

Form: AFTPI

Row-restrictions

None.

Column-restrictions

1.1/2.1 = 1.1/2.2 + 1.1/2.3
1.2/2.1 = 1.2/2.2 + 1.2/2.3
1.9/2.1 = 1.9/2.2 + 1.9/2.3
1.10/2.1 = 1.10/2.2 + 1.10/2.3
1.11/2.1 = 1.11/2.3
1.12/2.1 = 1.12/2.1 + 1.12/2.3
1.13/2.1 = 1.13/2.2 + 1.13/2.3
1.14/2.1 = 1.14/2.3
1.15/2.1 ≥ 1.15/2.4
1.15/2.1 ≥ 1.15/2.5
1.15/2.1 ≥ 1.15/2.6
1.16/2.1 ≥ 1.16/2.4
1.16/2.1 ≥ 1.16/2.5
1.16/2.1 ≥ 1.16/2.6

1.17/2.1 = 1.17/2.2 + 1.17/2.3
1.17/2.3 ≥ 1.17/2.4
1.17/2.3 ≥ 1.17/2.5
1.17/2.3 ≥ 1.17/2.6
1.18/2.1 = 1.18/2.2 + 1.18/2.3
1.18/2.3 ≥ 1.18/2.4
1.18/2.3 ≥ 1.18/2.5
1.18/2.3 ≥ 1.18/2.6

Form: MKORTPIa and MKORTPIb

Row-restrictions
1.1/2.1 = 1..2/2.1 + 1.3/2.1 + 1.4/2.1
1.1/2.2 = 1..2/2.2 + 1.3/2.2 + 1.4/2.2
1.1/2.3 = 1..2/2.3 + 1.3/2.3 + 1.4/2.3
1.1/2.4 = 1..2/2.4 + 1.3/2.4 + 1.4/2.4
1.1/2.5 = 1..2/2.5 + 1.3/2.5 + 1.4/2.5
1.1/2.6 = 1..2/2.6 + 1.3/2.6 + 1.4/2.6
1.1/2.7 = 1..2/2.7 + 1.3/2.7 + 1.4/2.7
1.1/2.8 = 1..2/2.8 + 1.3/2.8 + 1.4/2.8
1.1/2.9 = 1..2/2.9 + 1.3/2.9 + 1.4/2.9
1.1/2.10 = 1..2/2.10 + 1.3/2.10 + 1.4/2.10
1.5/2.1 = 1.6/2.1 + 1.7/2.1
1.5/2.2 = 1.6/2.2 + 1.7/2.2
1.5/2.3 = 1.6/2.3 + 1.7/2.3
1.5/2.4 = 1.6/2.4 + 1.7/2.4
1.5/2.5 = 1.6/2.5 + 1.7/2.5
1.5/2.6 = 1.6/2.6 + 1.7/2.6
1.5/2.7 = 1.6/2.7 + 1.7/2.7

Column-restrictions
1.1/2.1 = 1.1/2.2 + 1.1/2..3 + 1.1/2..5 + 1.1/2.6 + 1.1/2.7 + 1.1/2.8 + 1.1/2.9 + 1.1/2.10
1.2/2.1 = 1.2/2.2 + 1.2/2..3 + 1.2/2..5 + 1.2/2.6 + 1.2/2.7 + 1.2/2.8 + 1.2/2.9 + 1.2/2.10
1.3/2.1 = 1.3/2.2 + 1.3/2..3 + 1.3/2..5 + 1.3/2.6 + 1.3/2.7 + 1.3/2.8 + 1.3/2.9 + 1.3/2.10
1.4/2.1 = 1.4/2.2 + 1.4/2..3 + 1.4/2..5 + 1.4/2.6 + 1.4/2.7 + 1.4/2.8 + 1.4/2.9 + 1.4/2.10
1.5/2.1 = 1.5/2.2 + 1.5/2..3 + 1.5/2..5 + 1.5/2.6 + 1.5/2.7
1.6/2.1 = 1.6/2.2 + 1.6/2..3 + 1.6/2..5 + 1.6/2.6 + 1.6/2.7
1.7/2.1 = 1.7/2.2 + 1.7/2..3 + 1.7/2..5 + 1.7/2.6 + 1.7/2.7

1.1/2.3 ≥ 1.1/2.4

1.2/2.3 ≥ 1.2/2.4
1.3/2.3 ≥ 1.3/2.4
1.4/2.3 ≥ 1.4/2.4
1.5/2.3 ≥ 1.5/2.4
1.6/2.3 ≥ 1.6/2.4
1.7/2.3 ≥ 1.7/2.4

Form: NETSPOS

Row-restrictions
1.1/2.1 ≥ 1.2/2.1
1.1/2.1 ≥ 1.3/2.1
1.1/2.1 ≥ 1.4/2.1
1.1/2.1 ≥ 1.5/2.1
1.1/2.1 ≤ 1.6/2.1

Column-restrictions
None.

Form: TNETS

Row-restrictions
1.1/2.1 = 1.2/2.1 + 1.3/2.1
1.1/2.2 = 1.2/2.2 + 1.3/2.2

Column-restrictions
None.

Form: TAKORT

Row-restrictions
None.

Column-restrictions
None.

Form: AFTNETS

Row-restrictions
1.2/2.1 = 1.3/2.1 + 1.4/2.1

Column-restrictions
1.14/2.1 ≥ 1.14/2.2

1.14/2.1 ≥ 1.14/2.3
1.14/2.1 ≥ 1.14/2.4
1.15/2.1 ≥ 1.15/2.2
1.15/2.1 ≥ 1.15/2.3
1.15/2.1 ≥ 1.15/2.4
1.16/2.1 ≥ 1.16/2.2
1.16/2.1 ≥ 1.16/2.3
1.16/2.1 ≥ 1.16/2.4

Form: MUKORTa and MUKORTb

Row-restrictions

1.1/2.1 = 1.2/2.1 + 1.3/2.1
1.1/2.2 = 1.2/2.2 + 1.3/2.2
1.1/2.3 = 1.2/2.3 + 1.3/2.3
1.1/2.4 = 1.2/2.4 + 1.3/2.4
1.1/2.5 = 1.2/2.5 + 1.3/2.5
1.1/2.6 = 1.2/2.6 + 1.3/2.6
1.1/2.7 = 1.2/2.7 + 1.3/2.7

Column-restrictions

1.1/2.1 = 1.1/2.2 + 1.1/2.3 + 1.1/2.5 + 1.1/2.6 + 1.1/2.7
1.2/2.1 = 1.2/2.2 + 1.2/2.3 + 1.2/2.5 + 1.2/2.6 + 1.2/2.7
1.3/2.1 = 1.3/2.2 + 1.3/2.3 + 1.3/2.5 + 1.3/2.6 + 1.3/2.7

1.1/2.3 ≥ 1.1/2.4
1.2/2.3 ≥ 1.2/2.4
1.3/2.3 ≥ 1.3/2.4

Form: DELTBS

Row-restrictions

1.1/2.1 = 1.2/2.1 + 1.10/2.1
1.1/2.2 = 1.2/2.2 + 1.10/2.2
1.1/2.3 = 1.2/2.3 + 1.10/2.3
1.2/2.1 = 1.3/2.1 + 1.4/2.1 + 1.5/2.1
1.2/2.2 = 1.3/2.2 + 1.4/2.2 + 1.5/2.3
1.2/2.3 = 1.3/2.3 + 1.4/2.2 + 1.5/2.3
1.5/2.1 = 1.6/2.1 + 1.7/2.1 + 1.8/2.1 + 1.9/2.1
1.5/2.2 = 1.6/2.2 + 1.7/2.2 + 1.8/2.2 + 1.9/2.2
1.5/2.3 = 1.6/2.3 + 1.7/2.3 + 1.8/2.3 + 1.9/2.3

Column-restrictions

None.

Form: TBSa and TBSb

Row-restrictions
1.1/2.1 = 1.2/2.1 + 1.3/2.1
1.1/2.2 = 1.2/2.2 + 1.3/2.2
1.1/2.3 = 1.2/2.3 + 1.3/2.3
1.1/2.4 = 1.2/2.4 + 1.3/2.4
1.1/2.5 = 1.2/2.5 + 1.3/2.5
1.1/2.6 = 1.2/2.6 + 1.3/2.6
1.1/2.7 = 1.2/2.7 + 1.3/2.7
1.1/2.8 = 1.2/2.8 + 1.3/2.8

Column-restrictions
1.1/2.1 = 1.1/2.2 + 1.1/2.3 + 1.1/2.4 + 1.1/2.5 + 1.1/2.6 + 1.1/2.7 + 1.1/2.8
1.2/2.1 = 1.2/2.2 + 1.2/2.3 + 1.2/2.4 + 1.2/2.5 + 1.2/2.6 + 1.2/2.7 + 1.2/2.8
1.3/2.1 = 1.3/2.2 + 1.3/2.3 + 1.3/2.4 + 1.3/2.5 + 1.3/2.6 + 1.3/2.7 + 1.3/2.8
1.4/2.1 = 1.4/2.2 + 1.4/2.3 + 1.4/2.4 + 1.4/2.5 + 1.4/2.6 + 1.4/2.7 + 1.4/2.8
1.5/2.1 = 1.5/2.2 + 1.5/2.3 + 1.5/2.4 + 1.5/2.5 + 1.5/2.6 + 1.5/2.7 + 1.5/2.8

Andre restriktioner
1.1/2.9 ≤ 100
1.1/2.10 ≤ 100
1.2/2.9 ≤ 100
1.2/2.10 ≤ 100
1.3/2.9 ≤ 100
1.3/2.10 ≤ 100

Form: EPT

Row-restrictions
1.1/2.1 ≥ 1.2/2.1
1.1/2.1 ≥ 1.3/2.1
1.1/2.1 ≥ 1.4/2.1

Column-restrictions
None.

Form: POSKTL

Row-restrictions
1.1/2.1 ≥ 1.2/2.1
1.1/2.1 ≥ 1.3/2.1
1.1/2.1 ≥ 1.4/2.1
1.1/2.1 ≥ 1.5/2.1

Column-restrictions
None.

Form: HIKH

Row-restrictions
None.

Column-restrictions
None.

Form: MNETB

Row-restrictions
1.1/2.1 ≥ 1.2/2.1
1.1/2.2 ≥ 1.2/2.2
1.1/2.3 ≥ 1.2/2.3
1.1/2.4 ≥ 1.2/2.4

Column-restrictions
1.1/2.1 = 1.1/2.2 + 1.1/2.3 + 1.1/2.4
1.2/2.1 = 1.2/2.2 + 1.2/2.3 + 1.2/2.4
1.3/2.1 = 1.3/2.2 + 1.3/2.3 + 1.3/2.4

Form: DELRTGS

Row-restrictions
1.1/2.1 = 1.2/2.1 + 1.10/2.1
1.1/2.2 = 1.2/2.2 + 1.10/2.2
1.2/2.1 = 1.3/2.1 + 1.4/2.1 + 1.5/2.1
1.2/2.2 = 1.3/2.2 + 1.4/2.2 + 1.5/2.3
1.5/2.1 = 1.6/2.1 + 1.7/2.1 + 1.8/2.1 + 1.9/2.1
1.5/2.2 = 1.6/2.2 + 1.7/2.2 + 1.8/2.2 + 1.9/2.2

Column-restrictions
None.

Form: TRTGSa and TRTGSb

Row-restrictions
None.

Column-restrictions
1.1/2.1 = 1.1/2.2
1.1/2.1 = 1.1/2.6 + 1.1/2.7
1.2/2.1 = 1.2/2.2 + 1.2/2.3
1.2/2.3 = 1.2/2.4 + 1.2/2.5
1.2/2.1 = 1.2/2.6 + 1.2/2.7

Other restrictions
1.1/2.8 ≤ 100
1.1/2.9 ≤ 100
1.2/2.8 ≤ 100
1.2/2.9 ≤ 100

Form: AFTQVR

Row-restrictions
None.

Column-restrictions
1.1/2.1 ≥ 1.1/2.4
1.1/2.1 ≥ 1.1/2.5
1.1/2.1 ≥ 1.1/2.6
1.2/2.1 ≥ 1.2/2.4
1.2/2.1 ≥ 1.2/2.5
1.2/2.1 ≥ 1.2/2.6
1.3/2.1 = 1.3/2.2 + 1.3/2.3
1.3/2.3 ≥ 1.3/2.4
1.3/2.3 ≥ 1.3/2.5
1.3/2.3 ≥ 1.3/2.6
1.4/2.1 = 1.4/2.2 + 1.4/2.3
1.4/2.3 ≥ 1.4/2.4
1.4/2.3 ≥ 1.4/2.5
1.4/2.3 ≥ 1.4/2.6
1.7/2.1 = 1.7/2.2 + 1.7/2.3
1.8/2.1 = 1.8/2.2 + 1.8/2.3