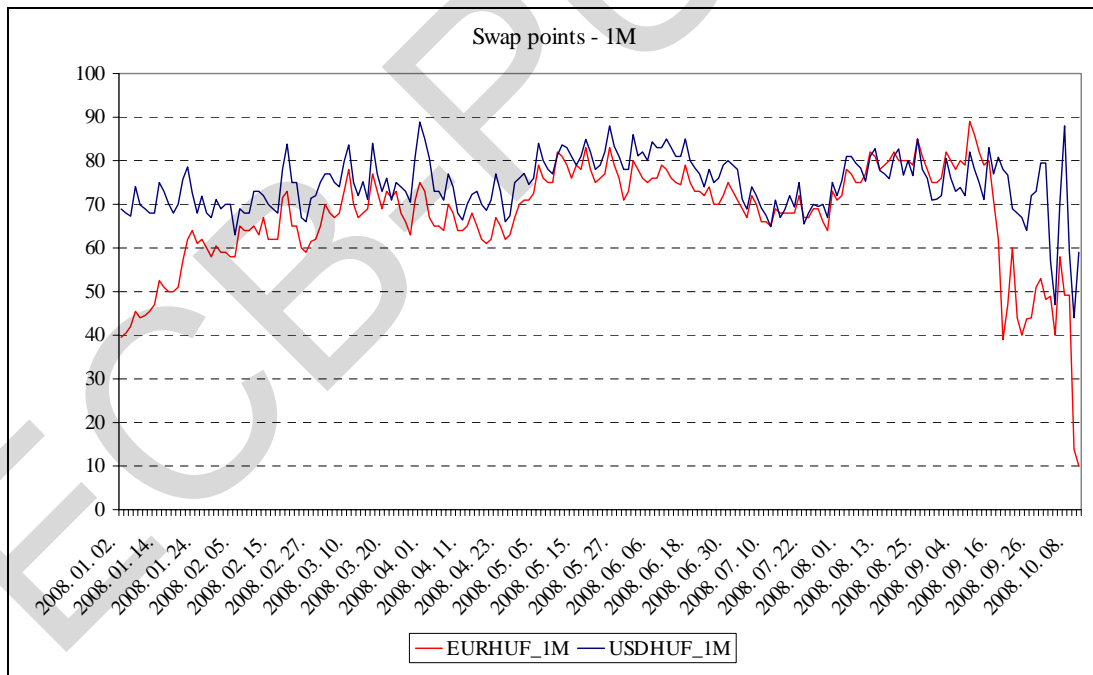


MNB measures to address tensions in the Hungarian forint FX swap markets

1. The situation in Hungary:

In recent days Hungarian and foreign market participants experienced fundamentally unjustified **severe market disorder in the HUF/USD and HUF/EUR FX-swap market**. This market is of high importance among Hungarian money markets, as usually the HUF FX swap market serves to make the FX liquidity needs of Hungarian banks meet the HUF liquidity needs of foreign banks and other foreign market participants. Foreigners need HUF to fund their positions in Hungarian markets (e.g. to finance HUF government bond holdings, stock purchases or short HUF positions). According to market prices and information from market participants, due to the substantial lowering / elimination of interbank limits the market is experiencing severe disruptions and disorder. It has to be stressed that both the demand and supply sides of this market are fundamental and cannot disappear at once, since foreign participants need HUF as much as Hungarians need FX to fund their positions and renew their maturing swaps. The lack of liquidity in the FX swap market manifested in high volatility and swap point quotes becoming unreliable (see Chart 1. and Chart 2.)

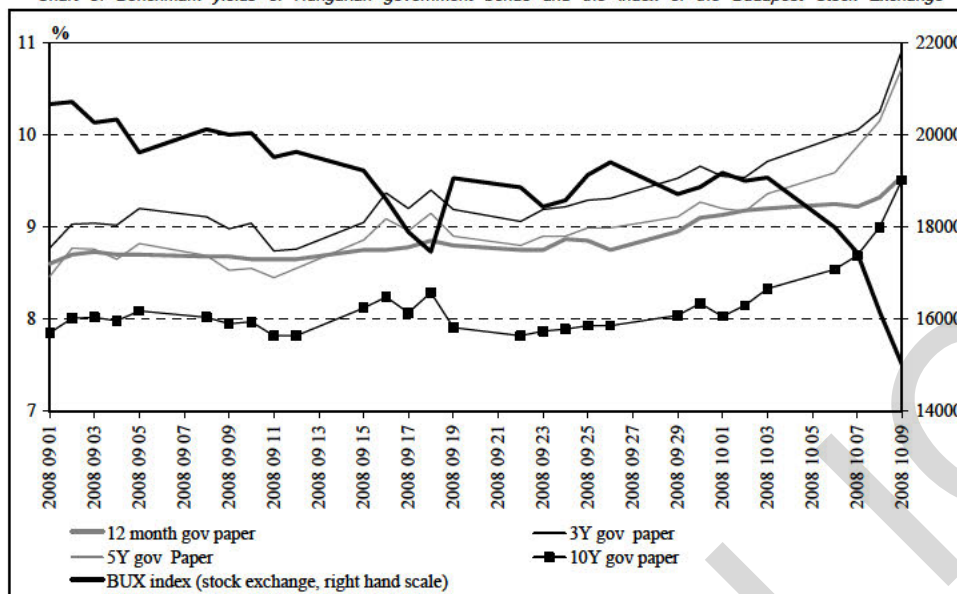
Chart 1. EUR/HUF and USD/HUF swap points - 1 month



The market disorder of the FX swap market evolved parallel to the turbulence of the HUF government securities market, and a strong decline of the index of the Budapest Stock Exchange. Government securities market is showing the signs of drying up - foreign market participants willing to buy are almost totally missing, there are no reasonable bid quotes, spreads have considerably widened. The index of the Budapest Stock Exchange has decreased dramatically losing 25 percent during the last week. As these markets are interconnected, the FX swap market providing foreign investors the opportunity to finance their holdings, these developments could have spiral effect strengthening each other and exacerbating the panic of the key money markets used for liquidity management. (see Chart 3.)

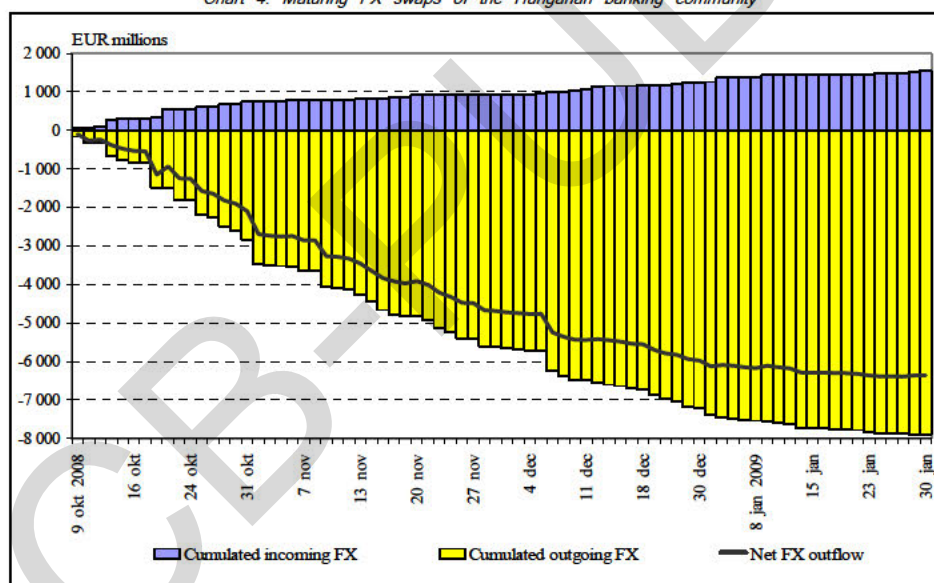
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Chart 3. Benchmark yields of Hungarian government bonds and the index of the Budapest Stock Exchange



From data reported daily by Hungarian commercial banks MNB is in the position to assess the full FX financing needs of the banking community from maturing FX swaps (see Chart 4).

Chart 4: Maturing FX swaps of the Hungarian banking community



As noted above the disfunctioning of the HUF FX swap markets concerns not only the FX funding of domestic banks, but the HUF funding of non-resident financial institutions active in Hungarian financial markets. Therefore the net FX needs of Hungarian banks is equal in size to the HUF liquidity needs of foreign participants in the coming days. Therefore it is expected that by far not all of the above funding need should be taken care of by the authorities as the other side of the market has to be there in some form.

**Hungarian authorities (including MNB, the financial supervisory authority and the ministry of finance) are all certain that this turbulence in key Hungarian funding markets have no fundamental roots.** The Hungarian banking sector mostly consists of branches and subsidiaries of Eurozone and US banks, and is one of the best capitalized banking system (due to several years of high profitability) in Europe (or in the world). The experienced disturbances are merely a sign of the global panic that also led to a significant decrease of confidence towards the largest Hungarian retail bank.

2. There is a need for central bank coordination:

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Since MNB considers there are no fundamental causes for panic in Hungarian money markets, **it will take steps to alleviate the current disorders:**

As the panic causes undue disruption to market mechanisms and market participants on both sides of the market face difficulties in finding alternative means a central bank coordination is warranted to prevent further detrimental psychological effects to the financial system.

As there are banks (Hungarian and foreign) who have the FX capacity needed to fund the FX giving side of the HUF/FX FX-swap market, (mostly because directly or indirectly they have access to Eurosystem operations) and these banks do have substantially higher limits towards MNB than towards other Hungarian market participants. Therefore in order to prevent a fundamentally unjustifiable panic in Hungarian money markets, **MNB will act as an intermediary in this market, entering into FX swaps where it gives HUF and receives EUR on the one side, and allotting the EUR against HUF on the other side.**

### 3. The FX swap facility:

The facility will be put in place to facilitate the smooth flow of funds despite elimination / cut-back of interbank bilateral limits. MNB will hold multilateral variable rate back-to-back O/N EUR-HUF FX swap tenders in which counterparties deal with the central bank. The euro obtained by the central bank from the HUF-giving tenders will be allotted in the EUR-giving tenders. The tenders will be of O/N maturity with a variable rate. In order not to affect MNB's FX reserves directly, the allotted amounts would be the same in both directions. In EUR giving tenders MNB will apply a minimum implied EUR bid rate and in HUF giving tenders a maximum implied EUR bid rate. The operations would be renewed every day until MNB and market participants consider it necessary.

All counterparties who are eligible to use the current collateralised O/N HUF credit facility of MNB and operationally capable of conducting FX transactions with the central bank will be eligible to bid for these O/N FX swap-tenders. A minimum and maximum bid rates will ensure that all the banks who are able to do swaps in the market do it there and only resort to MNB if there are no other possibilities. MNB would built in an initial margin to ensure full collateralisation with respect to FX-rate volatility. All operations would be settled on a payment after payment basis. (counterparty pays first, the central bank pays only afterwards)

### 4. A potential role for the Eurosystem / ECB:

